

# **SYMPOSIUM W**

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**GEM4/SMART Symposium on Infections Diseases**

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## Symposium W: GEM4/SMART Symposium On Infectious Diseases

Level 2, Room 207 (Mon - Wed), Level 3, Room 305 (Thu), Level 3, Room 311 (Fri)

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break		(10:30 - 11:30) <b>Session W-S6</b>		(10:30 - 11:00) Coffee Break
(11:00 - 12:30) <b>Session W-S1</b>	(10:30 - 12:30) <b>Session W-S4</b>	/	<b>ROOM 305</b> (10:30 - 12:00) <b>Session W-S9</b>	<b>ROOM 311</b> (11:00 - 12:00) <b>Session W-S12</b>
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch  (13:00 - 14:30) Panel Discussion	/
(14:00 - 16:15) <b>Session W-S2</b>	(14:00 - 16:15) <b>Session W-S5</b>	(14:00 - 15:30) <b>Session W-S7</b>	<b>ROOM 305</b> (14:30 - 16:00) <b>Session W-S10</b>	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(16:15 - 16:30) Break	/	(15:30 - 16:15) <b>Session W-S8</b>	/	/
(16:30 - 17:15) <b>Session W-S3</b>	/	/	/	/
/	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	/

**W-S1**

Monday, 29 June 2009  
11:00 - 12:30  
Level 2, Room 207

11:00 W-S1.1-2(IN)

Title to be announced

Paul MATSUDAIRA

11:30 W-S1.3-4(IN) A02973-05083 pg W18

Structures of Portal Vertex Complexes in  
Double-Stranded-DNA Viruses

Wah CHIU

12:00 W-S1.5-6(IN) A02800-04791 pg W13

Envelope Capsid Interaction in Hepatitis B Virus is  
Mediated by Variable Contacts

Bettina BOETTCHER, Stefan SEITZ, Stephan URBAN

**W-S2**

Monday, 29 June 2009  
14:00 - 16:15  
Level 2, Room 207

14:00 W-S2.1-2(IN) A02882-04930 pg W15

Development of Immune based Therapeutic  
Approaches for HBV Chronic Infections: T Cell  
Receptor (TCR) - Redirected T Cells and TCR-like  
Antibodies

Antonio BERTOLETTI

14:30 W-S2.3-4(IN) A02807-04815 pg W13

Deciphering Immune Responses to Chikungunya to  
Guide Development of New Immune-based Control  
Strategies

Lisa F. P. NG

15:00 W-S2.5(O) A02968-05076 pg W17

Recent Advancement of Single Cell Assay as a  
Platform for the Infectious Disease Research

Jae Hyeok CHOI, Melvin Tan Lik CHERN,  
Mah Lee Mary NG, Gijsbert Marnix GROTENBREG,  
J. Christopher LOVE, Hidde PLOEGH

15:15 W-S2.6(O) A00087-00355 pg W5

Improvement of Sample Preparation with the Bead-  
Beating Technologies in Infectious Diseases Studies

Elna MACHEFER, Romain VEROLLET

15:30 W-S2.7(O) A02819-04830 pg W14

Magnetofection: *In Vitro* Studies of Magnetic Particle  
Assisted Gene Delivery

Derrick ANG, Peter PREISER, Raju RAMANUJAN

15:45 W-S2.8(O) A02905-04965 pg W16

*In vitro* Drug Interactions of Epicatechin Gallate  
and Ethyl Gallate with Non Beta-Lactam Antibiotics  
in Methicillin Resistant and Methicillin sensitive  
*Staphylococcus aureus*

Win Mar SOE, Meena Kishore SAKHARKAR

16:00 W-S2.9(O) A02500-04280 pg W9

An Approach to Objective Function for Automatic  
Selection of Beam Directions in CT Image  
Reconstruction

Rena WIDITA, Yudi DARMA

**W-S3**

Monday, 29 June 2009  
16:30 - 17:15  
Level 2, Room 207

16:30 W-S3.1(O) A00974-01723 pg W6

Molecular Diagnosis of Visceral Leishmaniasis (VL)  
and Post Kala-azar Dermal Leishmaniasis (PKDL),  
and Assessment of Cure

Poonam SALOTRA, NS NEGI, V RAMESH,  
Rajesh KUMAR, Sandeep VERMA

16:45 W-S3.2(O) A03031-05165 pg W22

Crystallization and Structure Determination of a  
Truncated Form of the Nucleotide Binding Domain of  
the Reticulocyte Binding Protein Py235 of *Plasmodium*  
*Yoelii*

Ardina GRÜBER, M. S. S. MANIMEKALAI,  
A. M. BALAKRISHNA, P. PREISER, G. GRÜBER

17:00 W-S3.3(O) A03030-05164 pg W21

Human Respiratory Syncytial Virus Infection: Role of  
Viral Genomics

Rajni KUMARIA, Martin HIBBERD, Richard SUGRUE

**W-S4**

Tuesday, 30 June 2009  
10:30 - 12:30  
Level 2, Room 207

10:30 W-S4.1-2(IN) A02830-04850 pg W15

Single-cell Microtools for Profiling Human Immune  
Responses

J. Christopher LOVE

11:00 W-S4.3-4(IN) A02653-04549 pg W9

Humanized Mice: Recent Development

Jianzhu CHEN, Adam DRAKE, Maroun KHOURY,  
Ilya LESKOV, Maria FRAGOSO

11:30 W-S4.5-6(IN)

Rafting with Respiratory Syncytial Virus

Richard SUGRUE

**12:00 W-S4.7-8(IN)**  
**MCP-1 Antibody Treatment Enhances Damage and Hampers Regeneration of the Alveolar Epithelium in Influenza Pneumonitis**  
Vincent CHOW

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**W-S5**

Tuesday, 30 June 2009  
14:00 - 16:45  
Level 2, Room 207

**14:00 W-S5.1-2(IN) A02696-04636 pg W10**  
**The Auto-digestion Hypothesis in Inflammation and Diseases**  
Geert W. SCHMID-SCHÖNBEIN, Frank A. DELANO, Alexander H. PENN, Edward D. TRAN

**14:30 W-S5.3-4(IN) A02724-04687 pg W12**  
**Nanomaterials for Drug Delivery, Immunotherapy and Vaccines**  
Darrell IRVINE

**15:00 W-S5.5(O) A02022-04508 pg W8**  
**Immune Responses Against the Leading Malaria Vaccine Play A Minor Role in Sterile Protection Sporozoite Infection**  
Marjorie MAUDUIT, Rita TEWARI, Nadya DEPINAY, Michele KAYIBANDA, Eliette LALLEMAND, Jean-Marc CHAVATTE, Georges SNOUNOU, Laurent RENIA, Anne Charlotte GRUNER

**15:15 W-S5.6(O) A02723-04684 pg W11**  
**Monoclonal Antibodies against PfrH1 Erythrocyte Binding Domain Disrupt Merozoite Invasion**  
Xiaohong GAO, Shu Lin Sally YAP, Karthigayan GUNALAN, Kim Pin YEO, Ximei HUANG, Peter Rainer PREISER

**15:30 W-S5.7(O) A02705-04797 pg W11**  
**Effects of Artemisinin on Var Gene Family Regulation and Chromatin Structure in *Plasmodium Falciparum***  
Sachel MOK, Zbynek BOZDECH

**15:45 W-S5.8(O) A02805-04796 pg W13**  
**Calcium Ionophores Regulate Plastid Genome Transcription in *Plasmodium Falciparum***  
Sabna CHEEMADAN, Zbynek BOZDECH

**16:00 W-S5.9(O) A02726-04746 pg W12**  
**Quantitative Protein Abundance Profiles throughout the Intraerythrocytic Developmental Cycle of the Malaria Parasite *Plasmodium Falciparum***  
Bernardo J. FOTH, Neng ZHANG, Balbir K. CHAAL, Sachel MOK, Newman S.K. SZE, Peter R. PREISER, Zbynek BOZDECH

**16:15 W-S5.10(O) A02981-05097 pg W18**  
**Angiopoietin-like-5 Secreted by Mesenchymal Stem Cells Supports a Long Term Ex Vivo Expansion of Human Hematopoietic Stem Cells**  
Maroun KHOURY, Adam DRAKE, Ilya LESKOV, Maria FRAGOSO, Harvey LODISH, Jianzhu CHEN

**16:30 W.S5.11(O) A02981-05103 pg W18**  
**Generation of Adaptive and Innate Immunity in Humanized Mouse Model**  
Qingfeng CHEN, Maroun KHOURY, Yan LI, Adam DRAKE, Jianzhu CHEN

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**W-S6**

Wednesday, 1 July 2009  
10:30 - 12:30  
Level 2, Room 207

**10:30 W-S6.1-2(IN)**  
**Biochemistry of Antigen Presentation in Infectious Models**  
Hidde PLOEGH

**11:00 W-S6.3-4(IN) A02987-05106 pg W20**  
**Effect of Antibodies and Antiviral Peptides on the Structure of Dengue Virus**  
Shee-Mei LOK

**11:30 W-S6.5-6(IN) A03014-05143 pg W21**  
**The Rheology of Malaria Infection**  
Brian M. COOKE

**12:00 W-S6.7-8(IN) A02987-05106 pg W20**  
**Imaging Motile Parasites during Transmission of Malaria**  
Freddy FRISCHKNECHT

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**W-S7**

Wednesday, 1 July 2009  
14:00 - 15:30  
Level 2, Room 207

**14:00 W-S7.1-2(IN) A02986-05104 pg W20**  
**How Mechanical Features of Both Erythrocytes and Filtering Beds of the Spleen May Influence the Course of Malaria ?**  
Pierre BUFFET

**14:30 W-S7.3-4(IN) A02982-05098 pg W19**  
**Molecular-Level Biophysical Properties of Human Red Blood Cells and Connections to Pathological States**  
M. DIEZ, D. J. QUINN, M. DAO, Subra SURESH

**15:00 W-S7.5(O) A02688-04630 pg W10**  
**The Conserved Region of the *Plasmodium falciparum* *stevor* Multigene Family Binds to Erythrocytes and Potentially Inhibits Merozoite Invasion**  
Makhtar NIANG, Shaaretha PELLY, Kim Pin YEO, Peter Rainer PREISER

**15:15 W-S7.6(O) A01884-03251 pg W8**  
**Parasite and Leukocyte Sequestration during Experimental Cerebral Malaria**  
Carla CLASER, Laurent RENIA

**W-S8**

Wednesday, 1 July 2009  
 15:30 - 16:15  
 Level 2, Room 207

**15:30 W-S8.1(O) A01130-01937 pg W6**  
**The Effect of Biomechanical Stress on the Biology of the Malaria Parasite *Plasmodium falciparum***  
Alvin CHONG, Kevin TAN

**15:45 W-S8.2(O) A01292-02252 pg W7**  
**Cell Deformability Sorter for Malaria Diagnostic Application**  
Han Wei HOU, Hansen BOW, Shyong Wei, Kevin TAN, Jongyoon HAN, Chwee Teck LIM

**16:00 W-S8.3(O) A02822-04836 pg W15**  
**Atomic Force Microscopy Imaging of Surface Ultrastructures of Human Malaria Infected Erythrocytes**  
Ang LI, Bruce RUSSELL, Lek-Uthai USA, Suwanarusk ROSSARIN, Tjitra EMILIANA, Nosten FRANCOIS, Nick ANSTEY, Shyong Wei TAN, Chwee Teck LIM

**W-S9**

Thursday, 2 July 2009  
 10:30 - 12:30  
 Level 3, Room 305

**10:30 W-S9.1-2(IN) pg W15**  
**Human Adaptation of Influenza A Virus Hemagglutinin: 2009 "Swine" H1N1 Virus**  
Ram SASISEKHARAN

**11:00 W-S9.3-4(IN) A03033-05167 pg W22**  
**Geographic and Temporal Patterns of Epidemic Dengue/Dengue Hemorrhagic Fever: What are the causes?**  
Duane J. GUBLER

**11:30 W-S9.5-6(IN) A03032-05166**  
**Title not available at time of print**  
Nick WHITE

**12:00 W-S9.7-8(IN) A02966-05074 pg W17**  
**Nanoscale Imaging Probes for Infectious Disease Studies**  
Gang BAO

**W-S10**

Thursday, 2 July 2009  
 14:30 - 16:00  
 Level 3, Room 305

**14:30 W-S10.1-2(IN) A02680-04676 pg W9**  
**Nanobiophotonics and BioASICs for Molecular Diagnostics**  
Megan DUECK

**15:00 W-S10.3-4(IN) A02943-05032 pg W16**  
**VereFlu™ - Detection, Differentiation and Identification of Human Influenza A and B in One Step**  
Rosemary TAN

**15:30 W-S10.5(O) A00974-01714 pg W5**  
**Functional Genomics for the Discovery of Virulence Genes in *Leishmania***  
Poonam SALOTRA, Paresh SHARMA, Srividya GURUMURTHY, Robert DUNCAN, Hira L NAKHASI

**15:45 W-S10.6(O) A01820-03169 pg W7**  
**A Proteomic Characterization of a Golgi-associated Bi-lobed Structure in *Trypanosoma Brucei***  
Qing ZHOU, Cynthia Y. HE

**W-S12**

Friday, 3 July 2009  
 11:00 - 12:30  
 Level 3, Room 311

**11:00 W-S12.1-2(IN) A03010-05137 pg W21**  
**Regulation of Mycobacterial Cell Wall Metabolism**  
Eric RUBIN

**11:30 W-S12.3-4(IN) A02984-05101 pg W19**  
**Imaging Tuberculosis and the Response to Chemotherapy**  
Clifton BARRY

**12:00 W-S12.5-6(IN) A03035-05169**  
**Memory CD8 T Cell Differentiation**  
Rafi AHMED

**12:30 W-S12.7-8(IN) A03035-05169**  
**Transcriptional Profiling of Growth Perturbations and a Functional Interactome Network of Human Malaria Parasites, *Plasmodium falciparum***  
Zbynek BOZDECH

