

Saturday, September 13**The Premier Hall 2/3** (The Jade & The Topaz)**8:30-10:00 Virulence Factors SY-08**

Conveners: Joseph Heitman (*Duke University, USA*)
 Tamara L. Doering (*Washington University School of Medicine, USA*)

SY-08-01 Mathematical modeling of pathogenicity of *Cryptococcus neoformans*

○ Maurizio Del Poeta, Jacqueline Garcia
Medical University of South Carolina, USA

SY-08-02 Phospholipases and the Fungal Secretory Pathway

○ Julianne T Djordjevic, Methee Chayakulkeeree, A. Rosemary Siafakas, Tania C Sorrell
Centre for Infectious Diseases and Microbiology, Westmead Millennium Institute, Uni. of Sydney at Westmead Hospital, Westmead NSW, Australia

SY-08-03 Phenotypic switching of *Cryptococcus neoformans* and its contribution to virulence

○ Bettina C. Fries¹, Neena Jain¹, Abraham Guerero¹, Ye-Ping Hsueh², Josef Heitman², David L. Goldman¹, Uwe Himmelreich³

¹*Dept of Medicine, Microbiology and Immunology Albert-Einstein College of Medicine, USA;* ²*Departments of Molecular Genetics and Microbiology (MGM), Duke University Medical Center;* ³*Dept of Medicine KU Leuven*

SY-08-04 Genetic relationships between laccase and pathogenic fitness

○ Peter R. Williamson
Department of Medicine, University of Illinois at Chicago, Chicago, Illinois, USA

10:30-12:00 Tissue Tropisms (Lungs and Brain) SY-09

Conveners: John R. Perfect (*Duke University, USA*)
 Jennifer K. Lodge (*Saint Louis University, USA*)

SY-09-01 Mechanism of *Cryptococcus neoformans* neurotropism

○ Ambrose Y. Jong¹, Yun C. Chang², Sheng-He Huang¹, Nemani Prasadara¹, Chun-Hua Wu¹, Kyung J. Kwon-Chung²

¹*Children Hospital Los Angeles, Keck School of Medicine, USC, Los Angeles, CA90027, USA;* ²*Laboratory of Clinical Infectious diseases, NIAID, Bethesda, MD 20892*

SY-09-02 Oxygen sensing in *Cryptococcus neoformans*: Identification of the genes associated with the survival under low oxygen concentrations

○ Yun C. Chang¹, Susham S. Ingavale¹, Clara Bien², Peter Espenshade², June Kwon-Chung¹

¹*Laboratory of Clinical Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland, USA;* ²*Department of Cell Biology, Johns Hopkins University School of Medicine, Baltimore, USA*

SY-09-03 The Trojan horse model: a valid hypothesis for *Cryptococcus neoformans*?

○ Françoise Dromer¹, Caroline Charlier¹, Fabrice Chretien²

¹*Institut Pasteur, France;* ²*Faculte de Medecine Paris XII, Creteil, France*

SY-09-04 Cryptococcal Urease, a Virulence Factor that Facilitates CNS Dissemination by Enhancing *C. neoformans* Persistence in the Lungs and its Microvascular Sequestration during Fungemia

○ Michal A. Olszewski^{1,2}, Rishi Surana^{1,2}, John Osterholzer^{1,2}, Gwo-hsiao Chen^{1,2}, Galen B. Toews^{1,2}, Gary B. Huffnagle²

¹*VA Ann Arbor Health Systems, Research Service (11R), Ann Arbor, Michigan, USA;* ²*Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan, USA*

12:30-13:20 Luncheon Seminar 03 LS-03

Co-sponsored by Pfizer Inc.

Convener: Shigerfumi Maesaki (*Saitama Medical School, Japan*)

Cryptococcal infections in Nagasaki & Overview of Japanese Guideline for Diagnosis and Treatment of Deep-Seated Mycoses**LS-03-01 Hiroshi Kakeya**

Department of Immunology and Microbiology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan

LS-03-02 Yoshitsugu Miyazaki
Department of Mycoses and Bioactive Molecules, National Institute of Infectious Diseases, Tokyo, Japan

14:30-16:00 **Gene Regulation and Signaling II** **SY-10**

Conveners: Andrew Alspaugh (*Duke University School of Medicine, USA*)
Guilhem Janbon (*Institut Pasteur, France*)

SY-10-01 Cryptococcus gattii virulence mechanisms

○ Sudha Chaturvedi
Department of Health, Wadsworth Center, USA

SY-10-02 A plasma membrane calcium channel: Its role in ER stress and its potential as a therapeutic target

Min-Pyo Hong¹, Min Liu², Kiem Vu¹, Jennifer Bautos¹, ○ Angie Gelli¹
¹*Dept of Pharmacology, School of Medicine, University of California, Davis, CA USA;* ²*Department of Medicine, Division of Infectious Diseases and Geographic Medicine, Stanford University, Stanford CA USA*

SY-10-03 Molecular determinants of virulence regulation

○ Jim Kronstad, Wonhee Jung, Guanggan Hu, Po-Yan Cheng, Wayne Kuo
The Michael Smith Laboratories, University of British Columbia, Canada

SY-10-04 Molecular and biological evidence that the strain H99 does not represent serotype A C. neoformans

E. Sionov, H.S Lee, Y.C. Chang, J.E. Bennett, ○ June Kwon-Chung
Molecular Microbiology Section and Clinical Mycology Section, Laboratory of Clinical, Infectious Diseases, NIAID, NIH, Bethesda, Maryland, USA

16:00-17:30 **Sex, Mating and Evolution** **SY-11**

Conveners: June Kwon-Chung (*National Institutes of Health, USA*)
Jim Kronstad (*University of British Columbia, Canada*)

SY-11-01 Microevolutionary events shaping the genome of Cryptococcus neoformans

○ James A. Fraser
School of Molecular and Microbial Sciences, The University of Queensland, Brisbane, Australia

SY-11-02 Sexual reproduction of Cryptococcus

○ Joseph Heitman, Keisha Findley, Banu Metin, Marianela Rodriguez-Carres, Fred Dietrich, Yen-ping Hsueh, Chaoyang Xue
Department of Molecular Genetics and Microbiology, Duke University Medical Center, Durham, NC USA

SY-11-03 Sexual development, spores, and the host immune response

Michael R. Botts¹, Steven S. Giles¹, Brynne C. Stanton¹, Emilia K. Kruzel¹, ○ Christina M. Hull^{1,2}
¹*Department of Biomolecular Chemistry,* ²*Department of Medical Microbiology & Immunology, School of Medicine and Public Health, University of Wisconsin, USA*

SY-11-04 (P-A-14) Histopathological Features of Two Strains of Cryptococcus neoformans Var. gattii with Different Virulence, and Analysis of Differentially Expressed Genes

○ Haruo Nakayama^{1,2}, Minoru Shinozaki³, Toshohiro Aoyama⁴, Kazutoshi Shibuya²
¹*The 2nd Department of Neurosurgery, Toho University Medical Center Ohashi Ohashi Hospital, Tokyo, Japan;* ²*The Department of Surgical Pathology, Toho University, Tokyo, Japan;* ³*The Department of Surgical Pathology, Toho University Medical Center Omori Omori Hospital, Tokyo, Japan;* ⁴*The Department of Electronic and Information Engineering, Suzuka National College of Technology, Mie, Japan*

SY-11-05 (P-C-23) Caught in the Act: Microarray Analysis of C. neoformans sexual development

○ Emilia K. Kruzel¹, Christina M. Hull^{1,2}
¹*Department of Biomolecular Chemistry, University of Wisconsin-Madison, Madison, Wisconsin, USA;* ²*Department of Medical Microbiology & Immunology, University of Wisconsin-Madison, Madison, Wisconsin*