Cape Town Acid Fast Club

2.00 pm Tuesday 10th May 2016

Lecture Theatre 1, Groote Schuur Hospital, Observatory

Enter the New GSH complex through the Main Entrance off Palm Court (the parking area immediately in front of the Old GSH Building). Lecture Theatre 1 and Klein Schuur function room are straight ahead, on the far side of the entrance foyer. Take a right down the stairs to the lecture theatre.

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The organisers would like to acknowledge Cepheid Inc. for their generous sponsorship of this event.

Visualizing the Mycobacterial Mutasome

Michael A. Reiche,¹ Zela Martin,¹ Dirk Lang,² John McKinney,³ Neeraj Dhar,³ Valerie Mizrahi,¹,⁴ and Digby F. Warner¹,⁴

¹MRC/NHLS/UCT Molecular Mycobacteriology Research Unit, DST/NRF Centre of Excellence for Biomedical Tuberculosis Research, Department of Clinical Laboratory Sciences, Faculty of Health Sciences, University of Cape Town.
²Confocal and Light Microscope Imaging Facility, Department of Human Biology, Faculty of Health Sciences, University of Cape Town.
³UPKIN, Global Health Institute, School of Life Sciences, Ecole Polytechnique Fédérale de Lausanne, Switzerland.
⁴Institute of Infectious Disease and Molecular Medicine, Faculty of Health Sciences, University of Cape Town.

Single cell elucidation of mycobacterial replication dynamics

JM Mouton¹, S Helaine², DW Holden² and SL Sampson¹,²

¹SA MRC Centre for Tuberculosis Research, DST/NRF Centre of Excellence for Biomedical TB Research, Stellenbosch University, South Africa; ²MRC Centre for Molecular Bacteriology and Infection, Imperial College London, London, United Kingdom

Early morning urine collection to improve urinary LAM lateral flow assay sensitivity in hospitalised patients with HIV-TB co-infection.

Phindile Gina¹, Philippa J. Randall¹, Tapuwa E. Muchinga¹, Ani Pooran, Richard Meldau, Jonny G. Peter¹: Keertan Dheda¹*

¹Lung Infection and Immunity Unit, Division of Pulmonology and UCT Lung Institute, Department of Medicine, University of Cape Town, South Africa. *These authors contributed equally.

Genotypic patterns in untreatable TB.

Jason Limberis¹, Elize Pietersen¹, Jody Phelan², Aliasgar Esmail¹, Maia Lesosky³, Kevin P Fennelly⁴, Julian te Riele⁵, Barbara Mastrapa⁶, Paul Spiller⁵, Liezel Smith¹, Paul van Helden⁷, Frik A Sirgel⁷, Arnab Pain⁸, Ruth McNerney¹, Grant Theron¹,⁷, Taane G Clark⁴, Robin M Warren⁷ & Keertan Dheda¹

¹Division of Pulmonology and UCT Lung Institute, Department of Medicine, UCT; ²Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, Keppel Street, London, WC1E 7HT, United Kingdom ³Maia Lesosky, Department of Medicine, University of Cape Town ⁴Kevin Fennelly, Pulmonary Clinical Medicine Section, Cardiovascular and Pulmonary Branch, Division of Intramural Research, National Heart, Lung, and Blood Institute; National
Institutes of Health, Bethesda MD, U.S.A. (formerly at the University of Florida, Gainesville, FL)
5 Brooklyn Chest Hospital, Cape Town, South Africa
6 Harry Surti Hospital, Upington, South Africa
7 DST/NRF Centre of Excellence for Biomedical Tuberculosis Research/MRC Centre for Molecular and Cellular Biology, Division of Molecular Biology and Human Genetics, Faculty of Medicine and Health Sciences, Stellenbosch University, Tygerberg, South Africa
8 Pathogen Genomics Laboratory, BESE Division, King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia

**Linezolid resistance in clinical isolates of *M. tuberculosis***.

Taeksun Song

Institute of Infectious Disease and Molecular Medicine and Department of Clinical Laboratory Sciences, Faculty of Health Sciences, University of Cape Town

**Generating hypotheses for the role of *inhA* promoter mutations in the pre-existing presence of isoniazid and ethionamide resistance in *Mycobacterium tuberculosis***.

M Klopper¹, G Hill-Cawthorne², FA Sirgel¹, RG van der Merwe¹, EM Streicher¹, SL Sampson¹, A Pain³, RM Warren¹

¹ DST/NRF Centre of Excellence for Biomedical Tuberculosis Research / SAMRC Centre for Tuberculosis Research, Division of Molecular Biology and Human Genetics, Faculty of Medicine and Health Sciences, Stellenbosch University, South Africa; ² Marie Bashir Institute for Infectious Diseases and Biosecurity and School of Public Health, University of Sydney, Australia; ³ King Abdullah University of Science and Technology, Saudi Arabia