

**Session N.00715****15. Molecular diagnostics: bringing together  
the basic science and clinical worlds**

Thursday, 03 December 2015, 09:00 - 16:00

Room

**THE 46<sup>TH</sup> UNION  
WORLD CONFERENCE  
ON LUNG HEALTH**  
CAPE TOWN, SOUTH AFRICA  
2-6 DECEMBER 2015

Type of session	Workshop
Track	TB diagnostics, including molecular methods
Track2 (optional)	Drug resistance determination - molecular and phenotypic
Organised by	Whitehead Scientific; Hain Life Sciences
Duration	Full-day
Max attendees	75
Meeting type	Open meeting
Description	This workshop aims to encourage debate amongst scientists and clinicians on the generation, interpretation and translation of molecular data to improve patient management and advance research into TB pathogenesis and molecular epidemiology. Attendees will be able to gain a better understanding of current molecular assays and analysis tools with the inclusion of practical demonstrations and interactive discussions. Incorporating the clinical perspective enables discussions on the challenges of implementation, particularly in high TB-burden and/or resource-limited settings.
Target audience	<ol style="list-style-type: none"> <li>1. Researchers, clinicians, laboratory personnel</li> <li>2. Diagnostic assay developers (researchers and industry)</li> <li>3. Policy-makers, guideline development committee members, programme heads</li> </ol>
Objectives	<ol style="list-style-type: none"> <li>1. Present an update on the advances in TB molecular diagnostics and genotyping</li> <li>2. Foster better understanding of molecular diagnostics and TB genotyping</li> <li>3. Engage clinicians in discussions on the implementation, utility and understanding of molecular diagnostics</li> <li>4. Understand the limitations and advantages of molecular assays</li> <li>5. Advance translation of molecular data into practical management strategies</li> </ol>
Expected outcome	This workshop aims to build on discussions on molecular TB diagnostic tools, analyses and implementation. By bringing together laboratory scientists and clinicians, we hope to formulate a clearer roadmap towards implementing molecular diagnostics in the clinical setting.
Keywords	molecular diagnostic; next generation sequencing; clinical relevance
Coordinator(s)	Lynsey Isherwood (South Africa), Siva Danaviah (South Africa)
Chair(s)	Daniela Maria Cirillo (Italy), Francesca Conradi (South Africa)
Presentations	<ol style="list-style-type: none"> <li>1. Advances in TB molecular diagnostics: a global overview Catharina Boehme (Switzerland)</li> <li>2. DST using phenotypic or genotypic approaches: current state of knowledge Christopher Gilpin (Switzerland)</li> <li>3. Update on the status of data sharing Enrique Aviles (USA)</li> <li>4. Molecular diagnostics: laboratory-based training Shaheed Vally Omar (South Africa), ANDREA Cabibbe (Italy)</li> <li>5. NGS of M. tuberculosis: standardisation, web-based systems and analyses pipelines Stefan Niemann (Germany), Ruben Van Der Merwe (South Africa)</li> <li>6. M. tuberculosis heterogeneity as revealed by WGS analysis Robin Mark Warren (South Africa)</li> <li>7. A comprehensive NGS proposal Derrick Crook (UK)</li> <li>8. Training for the interpretation of the new MTBDRsl (version 2) strips Prinsloo Chrisna (South Africa)</li> <li>9. TB genotypic drug susceptibility testing in the clinic Pym Alexander (South Africa)</li> <li>10. Building confidence in molecular diagnostics - are we there yet? A clinical perspective Francesca Conradi (South Africa), Timothy Rodwell (USA)</li> </ol>