



# GLOBAL FORUM ON TB VACCINES

Partnering for Progress and Innovation

20–23 FEBRUARY 2018  
NEW DELHI  
INDIA

## SESSION PROGRAM

**Tuesday**  
**20 February 2018**

<b>08:00</b>	<b>REGISTRATION OPENS</b>
	<i>Coffee/tea available from 9:00 -10:30</i>
<b>10:30 – 12:15</b>	<b>OPENING SESSION</b>
Shahjehan	Co-Chairs: Danilo Casimiro, former Chief Scientific Officer, Aeras (USA)   Soumya Swaminathan, former Director-General, Indian Council of Medical Research (India)   David Lewinsohn, Chair, Stop TB Partnership Working Group on New Vaccines (USA)   Nick Drager, Executive Director, TuBerculosis Vaccine Initiative (Netherlands)
	<b>Overview of the TB epidemic globally and in India</b> Soumya Swaminathan, Deputy Director General of Programmes, World Health Organization (Switzerland)
	<b>Civil society perspective on the need for new TB vaccines</b> Blessina Kumar, Global Coalition of TB Activists (India)
	<b>Access and affordability for new TB vaccines</b> Hendrik Bekedam, World Health Organization Representative to India, WHO Country Office (India)
PS-01	<b>The potential public health impact of new TB vaccines</b> Richard White, Professor, London School of Hygiene and Tropical Medicine and Director, TB Modelling and Analysis Consortium (UK)
	<b>Partnerships and collaboration in TB vaccine R&amp;D</b> Renu Swarup, Senior Advisor, Department of Biotechnology, Ministry of Science & Technology (India)
	<b>India's commitment to end TB</b> Manoj Jhalani, Additional Secretary and Mission Director, National Health Mission, Ministry of Health & Family Welfare, Government of India
<b>12:15 – 13:00</b>	<b>KEYNOTE ADDRESS</b>
Shahjehan	<b>Why we need a vaccine to control TB and what we need to learn to develop an effective vaccine</b> Barry R. Bloom, Joan L. and Julius H. Jacobson Research Professor of Public Health, Harvard University (USA)
<b>13:00 – 14:00</b>	<b>LUNCH, RANI BAGH LAWN</b>
<b>14:00 – 16:00</b>	<b>PLENARY SESSION 1: INCREASING PROBABILITY OF SUCCESS AND MAXIMIZING IMPACT</b>
Shahjehan	Co-Chairs: Willem Hanekom, Bill & Melinda Gates Foundation (USA)   Gagandeep Kang, Translational Health Science and Technology Institute (India)
	<b>Vaccine strategies to address drug-resistant tuberculosis</b> Gavin Churchyard, The Aurum Institute (South Africa)
PS-02	<b>Decision-making in TB vaccine development: the stage-gate process</b> Georges Thiry, Aeras/TuBerculosis Vaccine Initiative Joint Working Group on Stage-Gates (France)
PS-03	<b>Can biomarkers advance the development of new TB vaccines?</b> Hazel M. Dockrell, London School of Hygiene and Tropical Medicine (UK)
PS-04	<b>Human TB Challenge – you can do that?</b> Eric J. Rubin, Harvard T.H. Chan School of Public Health (USA)
PS-05	<b>Enriching cohorts for smaller, quicker, more efficient TB vaccine studies</b> Dereck Tait, Aeras (South Africa)
<b>16:15 – 17:45</b>	<b>POSTER DISCUSSION/POSTER VIEWING SESSIONS</b>
Roshanara	Poster Discussion 1: Basic Vaccine Concepts and Correlates of Protective Immunity
Sheesh Mahal	Poster Discussion 2: Diagnostics and Epidemiology
Mumtaz Mahal	Poster Viewing: Novel Vaccine Concepts; Chemistry, Manufacturing and Controls
	<i>See Poster Program for additional details</i>
	<i>Coffee/tea to be served by the session room</i>

<b>17:45 – 18:30</b>	<b>NETWORKING AND REFRESHMENTS, RANI BAGH LAWN</b>
<b>18:30 – 20:00</b>	<b>INAUGURAL CEREMONY</b>
Shahjehan	Co-Chairs: Nick Drager, Executive Director, TuBerculosis Vaccine Initiative (Netherlands)   Lucica Ditiu, Executive Director, Stop TB Partnership (Switzerland) <b>Prevention is better than cure: A survivor story</b> Mona Balani, Touched by TB (India) <b>Regional efforts to bending the curve</b> Poonam Khetrapal Singh, WHO Regional Director for South-East Asia (India) <b>Translating rhetoric into action: Transforming the global TB response</b> Soumya Swaminathan, Deputy Director General of Programmes, World Health Organization (Switzerland) <b>India's mission to strengthen vaccine research</b> Anupriya Patel, Honourable Minister of State, Ministry of Health & Family Welfare, (India) <b>Research, innovation and partnerships as the pathway to success</b> Harsh Vardhan, Honourable Union Minister, Ministry of Science & Technology and Earth Sciences, Ministry of Environment, Forest & Climate Change (India)
<b>20:00 – 21:30</b>	<b>FORUM DINNER, RANI BAGH LAWN</b>

**Wednesday**  
**21 February 2018**

<b>09:00 – 11:00</b>	<b>PLENARY SESSION 2: CLINICAL DEVELOPMENT OF NEW TB VACCINES</b>
Shahjehan	Co-Chairs: Souleymane Mboup, Institut de Recherche en Santé, de Surveillance Epidémiologique et de Formations (Senegal)   Sanjay Mehendale, Indian Council of Medical Research (India)
PS-06	<b>A critical juncture in tuberculosis vaccine clinical development: overview of progress</b> Ann M. Ginsberg, Aeras (USA)
PS-07	<b>Community engagement and Good Participatory Practice guidelines for TB vaccine research and development</b> Moses Zimba, Centre for Infectious Disease Research in Zambia (Zambia)
PS-08	<b>Evaluating potential of vaccine(s) in preventing disease in healthy household contacts of TB patients</b> Kavita Singh, Multi Vaccines Development Program (India)
PS-09	<b>A new TB vaccine on the horizon</b> Umesh Shaligram, Serum Institute of India Ltd Pvt (India)
PS-10	<b>Prevention of infection with Mycobacterium tuberculosis by H4:IC31 vaccination or BCG revaccination in healthy adolescents: results of a randomized controlled trial</b> Mark Hatherill, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
<b>11:00 – 11:30</b>	<b>COFFEE/TEA BREAK</b>
<b>11:30 – 13:00</b>	<b>BREAKOUT SESSION 1: BASIC SCIENCE RESEARCH</b>
Shahjehan	Co-Chairs: Katrin Eichelberg, National Institute for Allergy and Infectious Diseases, National Institutes of Health (USA)   Rajesh Gokhale, National Institute of Immunology (India)
OA-01	<b>How EsxH controls host cellular responses to Mycobacterium tuberculosis?</b> Ekansh Mittal, Washington University School of Medicine (USA)
OA-02	<b>Elevated cyclic AMP inhibits Mycobacterium tuberculosis-stimulated T cell IFN-<math>\gamma</math> secretion through type I protein kinase A</b> Buka Samten, University of Texas Health Science Center at Tyler (USA)
OA-03	<b>A TOLLIP deficiency allele, rs5743854, is associated with decreased lncRNA TOLLIP-AS1 expression, BCG-specific T-cell memory phenotypes, and increased TB susceptibility</b> Javeed Ali Shah, University of Washington (USA)
OA-04	<b>Pulmonary mucosal BCG vaccination shows protection of infection in a novel repeated ultra-low dose challenge model in rhesus macaques</b> Frank A.W. Verreck, Biomedical Primate Research Centre (Netherlands)

OA-05	<b>Memory, activation and functional profiles of Mycobacterium tuberculosis-specific CD4 T cells in recent QFT converters</b> Cheleka Anne-Marie Mpande, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
OA-06	<b>Protein kinase G confers survival advantage to Mycobacterium tuberculosis during latency like conditions</b> Mehak Zahoor Khan, National Institute of Immunology (India)
<b>BREAKOUT SESSION 2: CLINICAL RESEARCH</b>	
Jehangir	Co-Chairs: Sanjay Gurunathan, Sanofi Pasteur (USA)   Randeep Guleria, All India Institute of Medical Sciences (India)
OA-07	<b>DAR-901: an inactivated whole cell NTM booster vaccine</b> C. Fordham von Reyn, Geisel School of Medicine at Dartmouth (USA)
OA-08	<b>A randomized, double-blind, dose-escalation clinical trial of MTBVAC compared to BCG Vaccine SSI, in newborns living in a tuberculosis endemic region</b> Michele Tameris, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
OA-09	<b>Clinical development of ID93+GLA-SE as a prophylactic or therapeutic vaccine for tuberculosis</b> Tracey Ann Day, Infectious Disease Research Institute (USA)
OA-10	<b>Use of oral inactivated Mycobacterium manresensis to reduce the risk of TB</b> Pere-Joan Cardona, Institut Germans Trias i Pujol (Spain)
OA-11	<b>Phase III, placebo-controlled, 2:1 randomized, double-blinded trial of tableted immunotherapeutic TB vaccine (V7) containing 10 microgram of heat-killed M. vaccae</b> Aldar S. Bourinbair, Immunitor LLC (Mongolia)
OA-12	<b>Randomized open phase 1 trial of TB/FLU-01L vaccine administered intranasally or sublingually for immunotherapy of pulmonary tuberculosis</b> Marina Stukova, Research Institute of Influenza (Russia)
<b>13:00 – 14:00</b>	<b>LUNCH – RANI BAGH LAWN</b>
<b>14:00 – 16:00</b>	<b>PLENARY SESSION 3: NOVEL APPROACHES TO TB VACCINE RESEARCH &amp; DEVELOPMENT</b>
Shahjehan	Co-Chairs: JoAnne Flynn, University of Pittsburgh (USA)   Anil Tyagi, Guru Gobind Singh Indraprastha University (India)
PS-11	<b>The route of BCG vaccination determines immunity and protection against Mycobacterium tuberculosis infection in non-human primates</b> Robert Seder, National Institute of Allergy and Infectious Diseases, National Institutes of Health (USA)
PS-12	<b>Vaccination following mycobacterial exposure</b> Thomas J. Scriba, South African Tuberculosis Vaccine Initiative (SATVI), University of Cape Town (South Africa)
PS-13	<b>Cytomegalovirus (CMV)-based TB vaccines</b> Aurelio Bonavia, Vir Biotechnology (USA)
PS-14	<b>Nucleic acid vaccines for tuberculosis</b> Jeffrey B. Ulmer, GSK Vaccines (USA)
PS-15	<b>Protective potential of Mycobacterium indicus pranii (MIP) and the underlying mechanisms in animal models of tuberculosis</b> Sangeeta Bhaskar, National Institute of Immunology (India)
<b>16:00 – 16:30</b>	<b>COFFEE/TEA BREAK</b>
<b>16:30 – 18:00</b>	<b>POSTER DISCUSSION SESSIONS</b>
Roshanara	Poster Discussion 3: Preclinical Research
Sheesh Mahal	Poster Discussion 4: Clinical Research and Community Engagement
Mumtaz Mahal	Poster Viewing: Basic Science Research, Biomarkers and Correlates, Epidemiology <i>See Poster Program for additional details</i>
<b>18:00 – 20:00</b>	<b>NETWORKING RECEPTION AND POSTER VIEWING</b>
	<i>Cultural performance followed by networking and poster viewing Posters on display in Mumtaz Mahal, Sheesh Mahal, and Roshanara Food and drink stations will be located in Shahjehan and Roshanara</i>

<b>07:15 – 08:45</b>	<b>SATELLITE SESSION: PANEL DISCUSSION AND AUDIENCE Q&amp;A ON THE H4:IC31®/BCG REVACCINATION POI TRIAL RESULTS</b>
Jehangir	<i>Organized by Sanofi Pasteur and Aeras Speakers/content to be announced Coffee/tea and light snacks provided</i>
<b>09:00 – 11:00</b>	<b>PLENARY SESSION 4: THE CUTTING EDGE: TRANSLATING SCIENTIFIC ADVANCES INTO NEW TB VACCINES</b>
Shahjehan	Co-Chairs: Peter Andersen, Statens Serum Institute (Denmark)   G.P. Talwar, Talwar Research Foundation (India)
PS-16	<b>Predictive biosignatures to improve tuberculosis vaccine development</b> Stefan H.E. Kaufmann, Max Planck Institute for Infection Biology (Germany)
PS-17	<b>Harnessing the power of innate immunity in vaccines against TB</b> Maziar Divangahi, McGill University (Canada)
PS-18	<b>Donor unrestricted T-cells (DURTS)</b> David Lewinsohn, Oregon Health & Science University (USA)
PS-19	<b>Tissue-resident memory T-cells in infection and inflammation</b> Chang Ook Park, Yonsei University College of Medicine (South Korea)
PS-20	<b>Targeting checkpoint inhibitor-PD-1 for enhancing efficacy of therapeutic vaccines in tuberculosis</b> Dipendra K. Mitra, All India Institute of Medical Sciences (India)
<b>11:00 – 11:30</b>	<b>COFFEE/TEA BREAK</b>
<b>11:30 – 13:00</b>	<b>BREAKOUT SESSION 3: NOVEL VACCINE CONCEPTS AND PRECLINICAL RESEARCH</b>
Shahjehan	Co-Chairs: Luciana Leite, Instituto Butantan (Brazil)   Seyed E. Hasnain, Jamia Hamdard (India)
OA-13	<b>Stress-response deficient attenuated Mycobacterium tuberculosis as next-gen TB vaccines</b> Deepak Kaushal, Tulane National Primate Research Center (USA)
OA-14	<b>Mechanisms of attenuation and protection of MTBVAC, a live attenuated tuberculosis vaccine moving to efficacy clinical trials</b> Carlos Martin, University of Zaragoza (Spain)
OA-15	<b>Increased efficacy of chemotherapy against Mycobacterium tuberculosis by additive immunotherapy using a multistage MVA vaccine</b> Stéphane Leung-Theung-Long, Transgene (France)
OA-16	<b>Immunogenicity and efficacy evaluation of multiple ChAd3-5Ag ± MVA-5Ag prime-boost vaccine regimens in rhesus macaques</b> Agnes Laurence Chenine, Aeras (USA)
OA-17	<b>Recombinant BCG expressing ESX-1 of Mycobacterium marinum combines low virulence with cytosolic immune signaling and improved tuberculosis protection</b> Matthias I. Gröschel, Institute Pasteur, Paris (France); University Medical Center Groningen (Netherlands)
OA-18	<b>Novel mucosal TB vaccine candidates generated by EMI-TB consortium</b> Rajko Reljic, St. George's Medical School, University of London (UK)
Jehangir	<b>BREAKOUT SESSION 4: BIOMARKERS, CORRELATES AND EPIDEMIOLOGY</b>
	Co-Chairs: Gerald Voss, TuBerculosis Vaccine Initiative (Belgium)   Vijaya Lakshmi Valluri, Bhagwan Mahavir Medical Research Centre (India)
OA-19	<b>NK cells and memory-like NK cells as immunological markers of protection against latent TB conversion in household contacts of TB patients</b> Kamakshi Prudhula Devalraju, Bhagwan Mahavir Medical Research Centre (India)
OA-20	<b>Gene expression profiles of pediatric tuberculosis patients and exposed controls from India</b> Jeffrey A Tornheim, Johns Hopkins University School of Medicine (USA)
OA-21	<b>Evaluating immune correlates of risk of Mycobacteria tuberculosis infection in humans</b> Iman Satti, University of Oxford (UK)
OA-22	<b>Maximising impact of the TB vaccine pipeline – mathematical modelling to inform target product profiles</b> Rebecca Claire Harris, London School of Hygiene and Tropical Medicine (UK)

OA-23	<b>Incidence of tuberculosis disease among household contacts of adult pulmonary tuberculosis patients in India – a multi centric cohort study</b> Sriram Selvaraju, National Institute for Research in Tuberculosis (India)
OA-24	<b>High risk for tuberculosis infections among medical and nursing trainees in India</b> Aarti Avinash Kinikar, Byramjee Jeejeebhoy Government Medical College and Sassoon General Hospital (India)
<b>13:00 – 14:00</b>	<b>LUNCH - RANI BAGH LAWN</b>
<b>14:00 – 16:30</b>	<b>PLENARY SESSION 5: PARTNERING FOR PROGRESS AND INNOVATION</b>
Shahjehan	Co-Chairs/Facilitators: Ole Olesen, European & Developing Countries Clinical Trials Partnership (Netherlands)   Renu Swarup, Biotechnology Industry Research Assistance Council (India); Department of Biotechnology (India) <b>Roundtable discussion featuring:</b> <ul style="list-style-type: none"> <li>• Fareed Abdullah, South African Medical Research Council (South Africa)</li> <li>• Shelly Batra, Operation AHSA (India)</li> <li>• Willem Hanekom, Bill &amp; Melinda Gates Foundation (USA)</li> <li>• Michel Kazatchkine, Global Health Centre, Graduate Institute for International and Development Studies (Switzerland)</li> <li>• Rajiv I. Modi, Chairman of the Confederation of Indian Industry National Council on Pharmaceuticals (India) and Cadila Pharmaceuticals (India)</li> <li>• Jacqueline Shea, Aeras (USA)</li> </ul>
	<b>CLOSING SESSION</b>
	Co-Chairs: Danilo Casimiro, former Aeras (USA)   Sanjay Mehandele, Acting Director-General, Indian Council on Medical Research (India)   David Lewinsohn, Stop TB Partnership Working Group on New Vaccines (USA)   Nick Drager, TuBerculosis Vaccine Initiative (Netherlands) <b>Closing Address</b> Lucica Ditiu, Stop TB Partnership (Switzerland)

**Friday**  
**23 February 2018**

	<b>SITE VISITS (Pre-registration Required)</b>
<b>9:00 – 11:30</b>	International Centre for Genetic Engineering and Biotechnology
<b>9:30 – 13:00</b>	National Institute for Tuberculosis and Respiratory Diseases
<b>8:30 – 12:30</b>	Operation ASHA
<b>8:30 – 14:00</b>	Translational Health Science and Technology Institute

# POSTER PROGRAM

**Tuesday  
20 February 2018**

<b>16:15 – 17:45 POSTER DISCUSSION 1: BASIC VACCINE CONCEPTS AND CORRELATES OF PROTECTIVE IMMUNITY</b>	
Roshanara	Facilitators: David Lewinsohn, Oregon Health & Science University (USA)   Vinay Kumar Nandicoori, National Institute of Immunology (India)
PD-01	<b>Treatment with non-steroidal anti-inflammatory drugs (NSAIDs) exacerbates TB infection after aerosol challenge in mice – implications for host-directed therapy</b> Rasmus Mortensen, Statens Serum Institut (Denmark)
PD-02	<b>Deciphering the role of VapBC TA modules in virulence and pathogenesis of Mycobacterium tuberculosis</b> Sakshi Agarwal, Translational Health Science and Technology Institute (India)
PD-03	<b>Mycobacterium tuberculosis hbhA and mtp deletion elicits unique canonical pathways during early infection in THP-1 differentiated macrophages</b> Suventha Moodley, University of KwaZulu-Natal (South Africa)
PD-04	<b>Targeting ClpB abrogates stress tolerance in Mycobacterium tuberculosis and hence its growth and infectivity</b> Prajna Tripathi, National Institute of Immunology (India)
PD-05	<b>Circulating HLA-DR+IFN<math>\gamma</math>IL-17hiCD4+T effectors resistant to CCR5 and PD-L1 mediated suppression compromise regulatory T cell function in tuberculosis</b> Asma Ahmed, Indian Institute of Science (India)
PD-06	<b>PPM, a novel Mycobacterium tuberculosis (Mtb) antigen: a candidate for vaccine development to prevent progression to tuberculosis</b> Chaouki Benabdessalem, Institut Pasteur de Tunis (Tunisia)
PD-07	<b>Evaluation of the immunogenicity of a promising vaccine regime to identify immune correlates of protection</b> Nawamin Pinpathomrat, University of Oxford (UK)
PD-08	<b>Demonstration of a correlation between the in vitro direct mycobacterial growth inhibition assay (MGIA) and protection from in vivo mycobacterial challenge</b> Rachel Tanner, University of Oxford (UK)
PD-09	<b>Altered systemic levels of neutrophil and mast cell granular proteins in tuberculosis-diabetes co-morbidity and changes following treatment</b> Kadar Abbas Moideen, National Institute of Health-NIRT-International Center for Excellence in Research (India)
<b>POSTER DISCUSSION 2: DIAGNOSTICS AND EPIDEMIOLOGY</b>	
Sheesh Mahal	Facilitators: Johan Vekemans, Initiative for Vaccine Research, World Health Organization (Switzerland)   Jaya Tyagi, Department of Biotechnology, All India Institute of Medical Sciences (India)
PD-22	<b>BCG vaccine as proof-of-concept</b> Marcel Behr, McGill University (Canada)
PD-23	<b>Effect of anti-tuberculosis treatment on the systemic levels of matrix metalloproteinases and tissue inhibitors of MMP in tuberculosis – diabetes co-morbidity</b> Nathella Pavan Kumar, NIH-ICER-NIRT (India)
PD-24	<b>The ESAT-6 free IGRA, a companion diagnostic for ESAT-6 based TB vaccines</b> Morten Ruhwald, Statens Serum Institut (Denmark)
PD-25	<b>Circulating Mycobacterium tuberculosis DosR latency antigen-specific, polyfunctional, regulatory IL10+ Th17 CD4 T-cells differentiate latent from active tuberculosis</b> Srabanti Rakshit, Indian Institute of Science (India)
PD-26	<b>Proliferative T cell (CD3+Ki67+) response to PPD and M. tuberculosis cell membrane complements the tuberculin skin test for detection of latent TB infection in healthy North Indian hospital contacts</b> Sudhir Sinha, Sanjay Gandhi Post-Graduate Institute of Medical Sciences (India)
PD-27	<b>CD14+ CD16+ cells as immunological marker for protection in household contacts with latent tuberculosis infection</b> Venkata Sanjeev Kumar Neela, Bhagwan Mahavir Medical Research Centre (India)

PD-28	<b>Optimization and interpretation of serial QuantiFERON testing to measure acquisition of M. tuberculosis infection</b> Elisa Nemes, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PD-29	<b>Updating the recommended age of BCG vaccination? Modelling the potential impact on global paediatric TB mortality</b> Partho Roy, London School of Hygiene and Tropical Medicine (UK) <i>Presented by Rebecca Harris, London School of Hygiene and Tropical Medicine (UK)</i>
PD-30	<b>Do we have identified target groups and a population based strategy for vaccination against tuberculosis to cut down transmission?</b> U.D. Gupta, National JALMA Institute for Leprosy and Other Mycobacterial Diseases (India)
PD-31	<b>TB Infection among household contacts: Preventive therapy for all?</b> Chandra Kumar Dolla, Byramjee Jeejeebhoy Government Medical College and Sassoon General Hospital (India)
PD-32	<b>Infection free “resistors” among household contacts of culture-confirmed adult pulmonary TB cases</b> Vidya Mave, Byramjee Jeejeebhoy Government Medical College - Johns Hopkins University Clinical Research Site (India)
PD-33	<b>Incidence of Mycobacterium tuberculosis infection among household contacts of adult pulmonary tuberculosis cases in India</b> Mandar Paradkar, Byramjee Jeejeebhoy Government Medical College Clinical Research Site (India)
Mumtaz Mahal	<b>POSTER VIEWING: NOVEL VACCINE CONCEPTS; CHEMISTRY, MANUFACTURING AND CONTROLS</b>
	<b>NOVEL VACCINE CONCEPTS</b>
PA-01	<b>The impact of previous BCG vaccination in enhancing the effectiveness of tuberculosis drugs to control mycobacterial growth ex-vivo</b> Satria Arief Prabowo, London School of Hygiene and Tropical Medicine (UK)
PA-02	<b>The role of DPP4 and antagonist CXCL10 in the pathogenesis of TB, an opportunity for vaccines and HDT?</b> Morten Ruhwald, Statens Serum Institut (Denmark)
PA-03	<b>Mycobacterium tuberculosis H37Rv cell wall isolated poly L-glutamines as novel Th1-biased adjuvant</b> Manish Gupta, Jawaharlal Nehru University (India)
PA-04	<b>De novo arginine biosynthesis pathway of Mycobacterium tuberculosis: A novel drug target and potential vaccine candidate</b> Sangeeta Tiwari, Albert Einstein College of Medicine (USA)
PA-05	<b>Epitope-based vaccine design for Mycobacterium tuberculosis strains through pan-genomic reverse vaccinology</b> Ravina Madhulitha Nalamolu, Sri Venkateswara Institute of Medical Sciences University (India)
PA-06	<b>Development of a recombinant BCG vaccine expressing a monomeric form of ESAT-6</b> Makram Essafi, Institut Pasteur de Tunis (Tunisia)
PA-07	<b>Insights into mycobacterial membrane vesicles: a potential subunit vaccine candidate</b> Praapti Jayaswal, Translational Health Science and Technology Institute (India)
PA-08	<b>Assessment of the protective effect, against tuberculosis, of a new vaccine composition</b> Rania Bouzeyen, Institut Pasteur de Tunis (Tunisia)
PA-09	<b>immunological activity of the fusion protein consisted of the major secretory protein of Mycobacterium tuberculosis</b> Hyun Shik Bae, Chungnam National University (South Korea)
PA-10	<b>Synthetic polysaccharide conjugate vaccines expressing Mycobacterium tuberculosis antigens induce high-titer antibody responses in mice, guinea pigs, and rabbits</b> Dominick Laddy, Aeras (USA)
PA-11	<b>Rv2882c-Rv20xxc, a novel immunostimulatory antigen of Mycobacterium tuberculosis, activates bone-marrow derived dendritic cell</b> Ki-Won Shin, College of Medicine, Chungnam National University (South Korea)
PA-12	<b>Mycobacterium tuberculosis protein Rv2299c fused-ESAT-6 subunit vaccine confers improved protection against the hypervirulent strain HN878 in mice</b> Seunga Choi, College of Medicine, Chungnam National University (South Korea)
PA-13	<b>Evaluation of attenuated strains as auxotrophic vaccines against Mycobacterium tuberculosis</b> Tannu Priya Gosain, Translational Health Science and Technology Institute (India)

CHEMISTRY, MANUFACTURING AND CONTROLS	
PA-14	<b>Miniaturized fluorescence adapter for fluorescence sputum smear microscopy using bright-field microscope</b> Pooja Singh, IIT Delhi (India)
PA-15	<b>Development of an innovative, rapid, affordable and automated system for selective enrichment, isolation and detection of MTB in sputum sample</b> Saumya Singh, IIT Delhi (India)
PA-16	<b>Comparison of pellicle and liquid grown BCG reference strains in standard BCG batch release assays and protection studies</b> Megan Fitzpatrick, Aeras (USA)

**Wednesday**  
**21 February 2018**

16:30 – 18:00 POSTER DISCUSSION 3: PRECLINICAL RESEARCH	
Roshanara	Facilitators: Danilo Casimiro, former Aeras (USA)   Sarala Balachandran, Council of Scientific and Industrial Research (India)
PD-10	<b>Early and local immune mechanisms of TB disease progression and control upon ultra-low dose infection in rhesus versus cynomolgus macaques</b> Karin Dijkman, Biomedical Primate Research Centre (Netherlands)
PD-11	<b>Experimental evaluation of a novel microneedle device for BCG vaccination</b> Jungho Kim, International Tuberculosis Research Center (South Korea) <i>Presented by Jake Whang, International Tuberculosis Research Center (South Korea)</i>
PD-12	<b>Role of BCG encapsulated alginate particles in activation of bone marrow derived dendritic cells for providing better immune response against TB</b> Ashwani Kesarwani, National Institute of Immunology; Jamia Handard (India)
PD-13	<b>bioA mutant of Mycobacterium tuberculosis shows severe growth defect and imparts protection against tuberculosis in guinea pigs</b> Ritika Kar Bahal, University of Delhi South Campus (India)
PD-14	<b>Animal dose response curve predicts lower optimal tuberculosis vaccine dose in humans: The use of vaccine Immunostimulation/Immunodynamic modelling methods to inform vaccine dose decision-making</b> Sophie Rhodes, London School of Hygiene and Tropical Medicine (UK) <i>Presented by Richard White, London School of Hygiene and Tropical Medicine (UK)</i>
PD-15	<b>T cell immunity in the lung and protection following aerosol, intravenous, or intradermal administration of BCG in nonhuman primates</b> Patricia Darrah, National Institute of Immunology and Infectious Diseases, National Institutes of Health (USA)
PD-16	<b>A recombinant BCG-LTAK63 strain induces increased innate and long-term immunity correlating with enhanced protection against tuberculosis</b> Luciana Leite, Instituto Butantan (Brazil)
PD-17	<b>Recombinant BCG-LTAK63 strain induces lower immunopathological effects and superior protection against tuberculosis in BALB/c and C57BL/6 mice</b> Carina Santos, Instituto Butantan (Brazil)
PD-18	<b>Intranasal vaccination with Mycobacterium indicus pranii leads to infiltration of protective memory T-cells in lung airway lumen</b> Ananya Gupta, National Institute of Immunology (India)
PD-19	<b>Boosting with recombinant MVA expressing <math>\alpha</math>-crystallin antigen of M. tuberculosis augments the protection imparted by BCG against tuberculosis in guinea pigs</b> Prachi Nangpal, University of Delhi South Campus (India)
PD-20	<b>A single dose nanoparticulate vaccine approach against tuberculosis</b> Manish Gupta, Jawaharlal Nehru University (India)
PD-21	<b>Passive vaccination with human IgA protects against MDR-TB infection in mice</b> Andy Tran, St. George's University of London (UK)



<b>POSTER DISCUSSION 4: CLINICAL RESEARCH AND COMMUNITY ENGAGEMENT</b>	
Sheesh Mahal	Facilitators: Souleymane Mboup, Institut de Recherche en Santé, de Surveillance Epidemiologique et de Formations (Senegal)   Lorraine Misquith, Lawyers Collective; Global Coalition of TB Activists (India)
PD-34	<b>Immunogenicity of AERAS-404 or BCG revaccination in a prevention of established M. tuberculosis infection efficacy trial</b> Virginie Rozot, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PD-35	<b>Phase 1 clinical trial to evaluate the safety and immunogenicity of an adenovirus-based tuberculosis vaccine (Ad5Ag85A) administered by aerosol to healthy volunteers</b> Fiona Mary Smaill, McMaster University (Canada)
PD-36	<b>Dose definition of the novel TB vaccine ID93 + GLA-SE for TB endemic countries</b> Adam Penn-Nicholson, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PD-37	<b>The Toll-like receptor 4 agonist adjuvant, GLA-SE, improves magnitude and quality of immune responses elicited by the ID93 tuberculosis vaccine</b> Tracey Ann Day, Infectious Disease Research Institute (USA)
PD-38	<b>Safety and immunogenicity of H56:IC31 in HIV negative adults with and without latent tuberculosis (TB) infection</b> Angelique Kani Luabeya, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PD-39	<b>Impact of implementing an effective community engagement strategy on retention rates in a Phase 2b TB disease prevention vaccine trial in South Africa, Zambia, and Kenya</b> Anja van der Westhuizen, Aeras Africa (South Africa)
PD-40	<b>Building a portfolio of community engagement projects to enhance TB</b> Michele Tameris, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PD-41	<b>Drama as a community engagement tool to raise TB awareness</b> Kelvin Vollenhoven, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PD-42	<b>Leveraging libraries to raise awareness about TB on World TB Day</b> Kelvin Vollenhoven, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PD-43	<b>Using eCompliance for tracking patients and ensuring accuracy of data in vaccine trials</b> Shelly Batra, Operation ASHA (India)
<b>POSTER VIEWING: BASIC SCIENCE RESEARCH, BIOMARKERS AND CORRELATES, EPIDEMIOLOGY</b>	
	<b>BASIC SCIENCE RESEARCH; BIOMARKERS OF CORRELATES OF IMMUNITY AND PROTECTION</b>
PA-17	<b>Functional, antigen-specific stem cell-like memory (Tscm) CD4+ T cells are induced by human Mycobacterium tuberculosis infection</b> Cheleka Anne-Marie Mpande, South African Tuberculosis Vaccine Initiative, University of Cape Town (South Africa)
PA-18	<b>Activation of L-type voltage gated calcium channel in macrophages suppresses protective responses during Mycobacterium tuberculosis infection</b> Deepika Sharma, University of Delhi (India)
PA-19	<b>Role of phosphorylation on secretion in Mycobacterium tuberculosis and its impact on its survival</b> Basanti Malakar, National Institute of Immunology (India)
PA-20	<b>Challenges in detecting TB drug resistance in a field setting in Southwestern Uganda</b> Patrick Orikiriza, Mbarara University of Science and Technology (Uganda)
PA-21	<b>Calcimycin induced autophagy decreases mycobacterial growth in THP-1 cells through P2RX7 dependent pathway mediated by intracellular calcium</b> Shradha Mawatwal, National Institute of Technology, Rourkela (India)
PA-22	<b>Phenotypic adaptation to drug treatment in Mycobacterium tuberculosis is mediated by DNA gyrase</b> Eira Choudhary, Translational Health and Science Technology Institute (India)
PA-23	<b>Assessment of anti-mycobacterial activity of some selected Congolese medicinal plants</b> Gedeon Ngiala Bongo, University of Kinshasa (Democratic Republic of Congo)
PA-24	<b>Various aspects of GTPases towards its essentiality in survival and pathogenesis of Mycobacterium tuberculosis H37Rv</b> Shivangi, CSIR-Institute of Genomics and Integrative Biology (India)

- PA-25 | **Cytokines, matrix metalloproteinases, angiogenic factors and acute phase proteins as biomarkers in tuberculous lymphadenitis**  
Gokul Raj Kathamuthu, National Institute for Research in Tuberculosis (NIRT)-NIH-ICER (India)
- PA-26 | **Urine IP-10 as a biomarker of therapeutic response in patients with active pulmonary tuberculosis**  
Hyejon Lee, Yonsei University College of Medicine (South Korea)  
*Presented by Bora Sim, Yonsei University College of Medicine (South Korea)*
- EPIDEMIOLOGY**
- PA-27 | **Sputum sample collection for diagnosis of pediatric pulmonary tuberculosis, does method and site of sample collection matter?**  
Willy Ssengooba, Makerere University (Uganda)
- PA-28 | **Tuberculosis massive active case discovery in East Jakarta 2016-2017: the role of Ketuk Pintu Layani Dengan Hati (KPLDH) and Juru Pemantau Batuk (Jumantuk) cadre programs**  
Ngabila Salama, East Jakarta Health Office (Indonesia)
- PA-29 | **Clinical profile of tuberculous meningitis in a tertiary care center in India**  
Anita Basavaraj, Byramjee Jeejeebhoy Government Medical College and Sassoon General Hospital (India)