

OPPORTUNITY ACCELERATOR AWARD HIGHLIGHT & SPECIAL REQUEST FOR APPLICATIONS

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The goal of Emory/Georgia TRAC <u>Accelerator Award</u> initiative is to provide small awards that allow recipients to fund specific research needs and/or support travel to build new collaborations. Anyone at an Emory/Georgia Partner Institution, including pilot grant recipients, are eligible to apply. Full details of the application process can be found <u>HERE</u>. We are excited to announce that **Meseret Habtamu**, **PhD**, post-doctoral researcher the Armauer Hansen Research Institute (AHRI), Addis Ababa, Ethiopia and Research Fellow with the Ethiopia-Emory TB Research Training Program recently received a TRAC-G Opportunity Accelerator Award.

The award will allow Dr. Habtamu to expand her research project entitled 'Immune Profiling in Tuberculosis: Revealing Protective Immunity and Disease Dynamics'.





Ethiopia-Emory TB Research Training Program

JULY, 2024

She will build upon ongoing research focused on monocyte characterization, including additional immune cells and effector molecules such as examining T cell subtypes and immune responsiveness based on surface expression of activation molecules, as well as cytokine/chemokine production profiles in individuals with active TB, their close contacts, and community controls without known TB exposure. Through the Ethiopia-Emory TB Research Training Program Dr. Habtamu will complete training in Dr. Cheryl Day's lab at Emory University. Dr. Habtamu's TRAC Opportunity Accelerator award will support the generation of preliminary data for a NIH K43 early career development award application.

> See Bulletin section for a Special Request for Applications: TB Data Science Accelerator Award

TRAC Welcomes International Partners



Kogie Naidoo, MBChB, PhD, Deputy Director, Centre of the AIDS Programme of Research in South Africa (CAPRISA) visited Emory and Dr. Sarita Shah in June to discuss data analysis for their <u>R01</u> award entitled 'The Role of Casual Contact and Migration in XDR TB Transmission in South Africa: a Geospatial, Genomic and

Social Network Study' for which Dr. Shah and Prof. Kogie are Multiple Principal Investigators. Prof. Naidoo also met with early-stage and established investigators, and TRAC leadership. Prof. Naidoo also serves as a valued member of the TRAC Internal Advisory Board.

Glyzelle Anne Lagason, **MD**, Junior Investigator and physician at the TB and HIV Research Unit, De La Salle Medical and Health Sciences Institute Philippines visited Emory in June to focus on manuscript writing for her TRAC-G pilot award entitled 'Undernutrition assessment, nutrient intake of TB patients, and feasibility of NACS in outpatient TB clinics in the Philippines'. Dr. Lagason met with collaborator Dr. Cegielski, TRAC students and faculty, participated in a TB Works in Progress seminar, and visited Emory Clinical Trials Unit sites at the Hope Clinic and Ponce Center.



TRACcolades



Congratulations to <u>Marian Loveday</u>, <u>Mphil</u>, <u>PhD</u>, Senior Scientist at the South African Medical Research Council, on receipt of her NIH/NIAID International Research in Infectious Diseases R01 award. Her project is entitled 'IMPILO: Investigating novel 6-month regimens for MDR/RR-TB in pregnancy and lactation.' Since very few pregnant women were included in clinical trials of a new all-oral 6-month

regimen for the treatment of rifampicin-resistant tuberculosis, Dr. Loveday's study will: 1) compare adherence to the new regimen in pregnant and non-pregnant women; 2) determine if there is an association with depression, especially in the postpartum period; and 3) explore the effect of pregnancy on the exposure of drugs in the regimen and determine drug concentrations in breastmilk and breastfed infants.

Congratulations to <u>Aniruddh Sarkar, PhD</u>, Assistant Professor in the Wallace H. Coulter Department of Biomedical Engineering, Georgia Institute of Technology and Emory School of Medicine on receiving his first NIH Research Project Grant as Principal Investigator and a new-to-TB researcher. Dr. Sarkar's project is entitled 'Microscale Multiplexed Antibody Fc Profiling and Nanoscale Electronic Detection for Rapid and Scalable



Point-of-Care Diagnosis of Tuberculosis'. To address a critical unmet need for a globally scalable, biomarker-based diagnostic for Tuberculosis from non-sputum-based samples Dr. Sarkar's study will develop a multiplexed microfluidic antibody profiling chip and couple it with machine-learning approaches to define an antibody Fc signature-based TB biomarker, and develop an inexpensive nanoscale approach for the detection of the biomarker from a single drop of blood at the point-of-care.



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Kudos to **Yikari Yoshii**, **MD**, **MPH**, 3rd year Pediatrics Infectious Diseases Fellow, Emory University School of Medicine on receiving the Best Poster award for his poster entitled '**Network Analysis of Children, Adolescents, and Young Adults with Drug-Resistant Tuberculosis, South Africa**' at the Pediatric ID Fellowship research symposium.

Stop B Partnership @ UNOPS

Congrats to **Maricelle Gler**, **MD**, Infectious Disease Specialist, Makati Medical Center in Manila, Philippines for successfully competing for funding from <u>TB Reach</u> Wave 11: Bringing Innovative approaches for TB and Lung Health closer to the point of need. The project is entitled **'Empowering community navigators for enhanced TB case finding and**



lung health improvement among public utility vehicle drivers in Silang Cavite'. A comprehensive lung health package will be offered to public utility vehicle drivers who are not reached by many public health programs. The package will include active TB case finding using innovative technologies, access to TB treatment, lung health awareness, care for chronic respiratory ailments, and support for smoking cessation. The project has three main aims: 1) increase TB case detection in drivers and expedite prompt linkage to TB care; 2) improve linkage to care for drivers who have chronic lung disease; and 3) link drivers who smoke to Quitline smoking cessation services.





Congratulations to Amadin Olotu, MBBS, FMCPath, MPH, research fellow with the <u>Center for the Health of Incarcerated Persons</u>, Rollins School of Public Health, Emory University for receiving a 12month Ferguson RISE Research Fellowship. Dr. Oluto's working title for his research project is 'Evaluating whole-genome multilocus sequence types of Mycobacterium tuberculosis isolated in the US from persons with a recent history of incarceration and isolates from adults and children without a history of incarceration to identify clusters, and possible previously unidentified cases of transmission and outbreaks.' His research mentor will be Dr. Anne Spaulding, Associate Professor of Epidemiology and Global Health at Rollins School of Public Health.

JULY, 2024



Kudos to Drs. Juliet Sekandi (UGA's College of Public Health) and Russell Kempker (Emory University School of Medicine) for being invited to present an in-depth symposium entitled '**A New Look at an Old Disease: Tuberculosis'** at the annual American



Society of Microbiology (ASM) Microbe meeting in Atlanta June 13-17, 2024.

Bulletin Board



SPECIAL REQUEST FOR APPLICATIONS TB DATA SCIENCE ACCELERATOR AWARDS

The Emory/Georgia Tuberculosis Research Advancement Center is excited to announce a special request for applications for TRAC Accelerator Awards to fund research using publicly available databases for TB research. The deadline for applications: December 2, 2024. More information and application portal can be found <u>here!</u>

The Union

International Union Against Tuberculosis and Lung Disease

ONLINE COURSE: HOW TO DEVELOP A RESEARCH GRANT PROPOSAL

The course aims to help learners develop an operational research grant proposal and was developed with support from the PROTECT <u>project</u> (MPI: Drs. Sarita Shah, Emory, and Macarthur Charles, CDC). It is available as an asynchronous online course with a mix of educational units of about 20 minutes each and includes polls, quizzes, small case studies, multiple-choice questions to support learner engagement. The following modules are included; Introduction to operational research, Research questions and methodology, Research methodology, data analysis and statistical analysis, Investigators, authorship, references, Ethics and completion of protocol, Types of grants and calls for proposals, and Project and budget management.

More information and registration can be found <u>here!</u>



partner institutions who are planning to submit a proposal to NIH by the October and November, 2024 deadlines. We encourage early-stage investigators to apply!



Have items to include in a future newsletter? Email: lisa.sharling@emory.edu

Upcoming Events

TB WORKS IN PROGRESS SEMINAR: ROUTINE CONTACT PATTERNS RELEVANT FOR AIRBORNE TRANSMISSION OF RESPIRATORY INFECTIONS IN FOUR COUNTRIES: THE GLOBALMIX STUDY



Friday July 19, 2024, 9-10 am CNR Room 2001 and Zoom

Dr. Kristin Bratton Nelson is an Assistant Professor in the Department of Epidemiology. She focuses on epidemiology and prevention of respiratory infections like tuberculosis and COVID-19. Her research combines dynamic modeling, causal inference, and pathogen genomics to study disease transmission patterns and intervention impacts, aiming to lessen global respiratory infection burdens, especially in lowand middle-income nations.



INFLUENTIAL MENTORING WORKSHOP SERIES All sessions are Thursdays 9am - 10am ET



The TRAC Influential Mentors series comprises five virtual sessions that focus on recent scholarship on mentorship, tools for mentors and mentees to strengthen relationships,

mentoring across cultures, and building mentoring programs. One session features a panel discussion where experienced mentors and mentees will share best practices and lessons learned. This series is tailored for TB research mentors and mentees from various backgrounds and ranks.

Participants who attend four out of five sessions will receive a certificate, however registered participants may attend select sessions. The sessions are led by Dr. Dawn Comeau, Director of Mentor Training at Emory's TRAC and

Professor at Rollins School of Public Health.



Foundations of Mentoring

Setting Expectations between Mentors and Mentees



Cross-cultural Mentoring



Mentoring Best Practices: A Panel Discussion with Experienced Mentors and Mentees



Building Mentoring Capacity at institutions

June Publications

Kiwanuka N, Quach T, Kakaire R, **Zalwango S**, Castellanos M, **Sekandi J, Whalen CC**. Incidence of tuberculous infection in a TB-endemic city. Int J Tuberc Lung Dis. 2024;28(6):266-72. DOI: 10.5588/ ijtld.23.0403.

Morgan H, Ndjeka N, Hasan T, **Gegia M**, Mirzayev F, Nguyen LN, Schumacher S, Schlub TE, **Naidoo** K, Fox GJ. Treatment of Multidrug-resistant or Rifampicin-resistant Tuberculosis With an All-oral 9month Regimen Containing Linezolid or Ethionamide in South Africa: A Retrospective Cohort Study. Clin Infect Dis. 2024;78(6):1698-706. DOI: 10.1093/cid/ciae145.

Ngo HX, Xu AY, Velásquez GE, Zhang N, Chang VK, Kurbatova EV, Whitworth WC, Sizemore E, Bryant K, **Carr W**, Weiner M, Dooley KE, Engle M, Dorman SE, Nahid P, Swindells S, Chaisson RE, Nsubuga P, Lourens M, Dawson R, Savic RM. Pharmacokinetic-Pharmacodynamic Evidence From a Phase 3 Trial to Support Flat-Dosing of Rifampicin for Tuberculosis. Clin Infect Dis. 2024;78(6):1680-9. DOI: 10.1093/cid/ciae119.

Roberts LW, Malone KM, Hunt M, Joseph L, Wintringer P, Knaggs J, Crook D, Farhat MR, Iqbal Z, **Omar SV**. MmpR5 protein truncation and bedaquiline resistance in Mycobacterium tuberculosis isolates from South Africa: a genomic analysis. Lancet Microbe. 2024. DOI: 10.1016/s2666-5247(24)00053-3.

van Wyk SS, Nliwasa M, Lu FW, Lan CC, Seddon JA, Hoddinott G, Viljoen L, Günther G, Ruswa N, **Shah NS**, Claassens M. Drug-Resistant Tuberculosis Case-Finding Strategies: Scoping Review. JMIR Public Health Surveill. 2024;10:e46137. DOI: 10.2196/46137.

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