

### Newsletter



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The Emory-Georgia TB Research Training Program hosted several collaborators from the Georgian National Center for TB and Lung Disease (NCTLD) in Atlanta during World TB day events. The week's activities included a brainstorming session with Emory and NCTLD collaborators involved with ongoing studies on drug-resistant TB, and TB and diabetes. It was a great opportunity to discuss research priorities, and explore potential future research projects and grant proposals.



Left to right: Mariana Buziashvili, Maia Kipiani, Nestani Tukvadze, Brendan Prideaux, Russell Kempker, Natalia Tsereteli, Jeffrey Collins, Kyleigh Marshall, Angie Campbell, Henry Blumberg, Sergo Vashakidze

#### John Green Book Event





Photo credit: Theo Gayle

John Green is a New York Times bestselling author of Looking for Alaska, An Abundance of Katherines, Paper Towns, The Fault in Our Stars, Turtles All the Way Down, The Anthropocene Reviewed and the brand new book Everything is Tuberculosis - released on March 18th. John and his brother Hank Green are the vlogbrothers on YouTube and creators of educational series Crash Course. It was great to see over 1,000 TRAC students, collaborators, faculty, and "Nerdfighters" (the term John and Hank Green use for their community of fans) at the 'John Green in conversation with Laurel Bristow' book event on March 21st at the Glenn Memorial Church. The energy and level of engagement was inspiring, especially among younger attendees for who John Green is a well-loved superstar due to growing up with the Crash Course series. It was also a great opportunity to work with Emory's new Center for Public Engagement and Scholarship and learn about the Center's work - we hope to find ways to collaborate again in the future! If you have yet to read Everything is Tuberculosis, it can be purchased through A Cappella Books or the vendors listed here.



You can keep up with John Green and the advocacy work of his **TBFighters** through the social media platforms and website **here**.

If you missed the event and Livestream you can listen to Laurel Bristow's bonus **Health Wanted Podcast here.** 

The event was also covered by Shelby Crosier in the Rollins News!

#### Kenneth Castro's Health Wanted Podcast



Listen to **Kenneth Castro**, **MD**, TRAC Associate Director, who was interviewed by Laurel Bristow for WABE's **World TB Day Health Wanted Podcast.** Dr. Castro discusses the impact of pausing USAID funding on global TB efforts, including access to low cost drugs and diagnostics, clinical trials, surveillance, and policy development.

## Yamin and Samanta's World TB Day presentation to the Villa International

Dr. Yamin Kyaw Thu, a Hubert H. Humphrey Fellow, and Dr. Samanta Biswas, a second year MSPH student in Global Epidemiology at Emory Rollins School of Public Health, teamed up to give a World TB Day presentation to guests and staff at the Villa International. Villa International is a non-profit that offers short-term housing for international guests, primarily international researchers with short-term assignments at the Centers for Disease Control and Prevention and Rollins School of Public Health. They shared their experience with TB programming and research, and their passion for working towards ending TB. Dr. Thu was formerly Assistant Director of the Subnational Tuberculosis and Leprosy Unit of Chin State Public Health Department in Hakha City, Burma (Myanmar), and Dr. Biswas worked at icddr,b, in Dhaka, Bangladesh, on research projects spanning new diagnostics and treatment monitoring, digital adherence technologies, TB-Diabetes, co-infections, gender-based barriers to care and health-



#### World TB Day Symposium

The TRAC World TB Day Symposium on March 24th was a fantastic opportunity to come together and recommit to the global fight to End TB. The symposium opened with presentations by Karen Reyna, TB Advocate with SomosTB, a Spanish-language TB support group, and Erin McConnell, MPH, Senior TB Project Associate with the advocacy organization Treatment Action Group. These were followed by scientific presentations from Ashutosh Pathak (University of Georgia), Hardy Kornfeld, MD (U Mass Chan Medical School) and Mariana Buziashvli, MPH (Georgian National Center for TB and Lung Disease). It was also an opportunity to recognize faculty and staff who received awards and promotions, and to thank the many reviewers who have volunteered to review TRAC pilot award applications and grant proposals for mock study sections. We are especially appreciative of those who braved the Atlanta traffic from Athens to attend in-person, and the many TRAC members who attended via Zoom across multiple time zones.

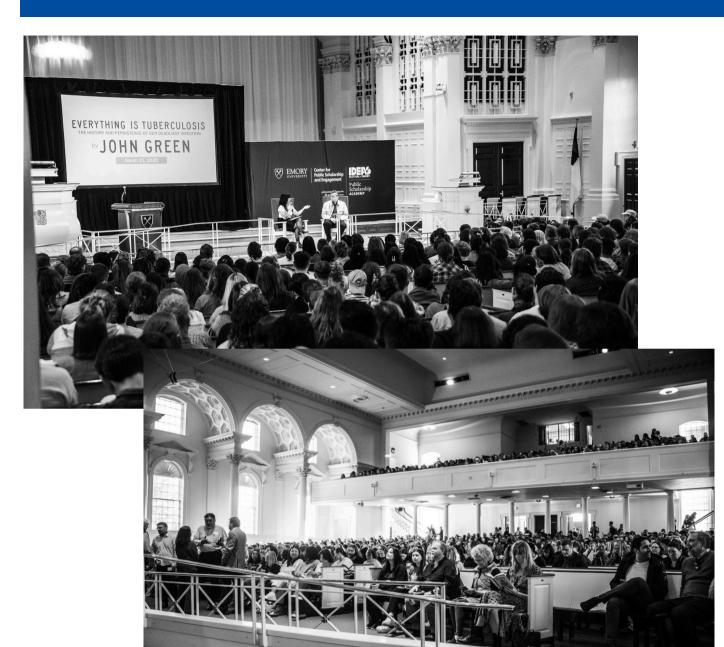






#### **World TB Day Photo Collage**





#### **TRAColade**



Adenike McDonald, MPH, is a PhD student in the Epidemiology and Biostatistics program at the University of Georgia College of Public Health and mentored by Emory-Georgia TRAC investigator <u>Dr. Juliet Sekandi</u>. Adenike presented her poster entitled "Comparing Self-reported TB-related Symptoms among adults using VDOT vs UC-DOT during TB treatment in Kampala, Uganda" at the 2025 Georgia

Clinical and Translational Science Conference at Callaway Gardens, Georgia March 5-7.

#### **Publication Highlights**



Kudos to **Kristin Nelson**, **PhD**, on her recent publication in The Lancet Respiratory Medicine titled "Unveiling a hidden phenotype of early tuberculosis". This study highlights emerging research on asymptomatic tuberculosis, emphasizing its significant role in the ongoing epidemic.

Kudos to Sarita Shah, MD, MPH on her recent publication in Clinical Infectious Diseases titled "Lower Tuberculosis Incidence Among People With Human Immunodeficiency Virus Who Completed Isoniazid Preventive Therapy in Ukraine, a High-Burden Multidrug-Resistant Tuberculosis Setting" which assesses the relationship between isoniazid preventive therapy (IPT) and TB incidence among people with HIV (PWH) in Ukraine. This study concludes that completing IPT as part of a public health intervention can significantly reduce TB incidence among PWH, even in high MDR TB settings.





Congratulations to **Shewki Moga** on his manuscript acceptance titled "Isoniazid-resistant TB and associated factors in Ethiopia: A retrospective study from Drug Resistance Survey". Shewki is a former Ethipia-Emory TB Research Training Program trainee and this is his third and final publication for his PhD.

Congratulations to **Sara Auld**, **MD**, **MSc**, on her recent publication in The Lancet Respiratory Medicine titled "Post-tuberculosis lung disease: towards prevention, diagnosis, and care". The review focus on strategies for post-tuberculosis lung disease prevention, diagnosis, and care to inform the ongoing work of tuberculosis-affected communities, health-care providers, researchers, and policy makers. This review summarizes recent data, highlights evidence gaps, and suggests key research priorities for those working in the field.



#### **Upcoming Events**

# TB WORKS IN PROGRESS SEMINAR: IDENTIFYING TUBERCULOSIS BIOMARKERS AND HOST IMMUNE PROTECTIVE MECHANISMS AGAINST MYCOBACTERIUM TUBERCULOSIS ACROSS THE DISEASE SPECTRUM





Friday April 18, 2025, 10-11 am CNR Room 3001 and Zoom [Flyer]

Dr. Padmini Salgame is a Professor at Rutgers University, Co-Director of the MD/PhD Program, and Associate Director of the Public Health Research Institute. Her research focuses on immunity to tuberculosis, the impact of Mycobacterium tuberculosis strain variation on transmission, and identifying biomarkers across the disease spectrum. She collaborates globally and serves as an editor for Infection and Immunity and PLOS Pathogens.

#### SYSTEMS BIOLOGY VIRTUAL & IN-PERSON OFFICE HOURS

4th Thursday of the month
10am - 11am ET, RRR 205 & Zoom



Jeffrey Collins, MD, MS

Boris Minasenko, MS

Ashish Sharma, PhD

Drop in to receive one-on-one support from Emory University informaticists with 'omics' study design and data analysis for tuberculosis research - including bulk and single cell transcriptomics, metabolomics and lipidomics. For more information please contact:



jeffrey.michael.collins@emory.edu

#### EARLY-STAGE INVESTIGATOR PEER MENTORSHIP PROGRAM



Thursday April 24, 2025 12-1:30 EST RSPH, R. Randall Rollins (RRR) BLDG





Meet fellow early-stage TB investigators, including PhD students, post docs and fellows to network, create community and learn about the value of peer mentoring and discuss future opportunities to be offered through the Emory/Georgia TRAC. The session will be led by **Dr. Dawn Comeau**, TRAC Director of Mentor Training and Professor at Rollins School of Public Health. Open to TRAC-affiliated PhD students, postdocs and fellows working on TB research. **In-person only. See flyer here**.

### GRANT WRITING WORKSHOP FOR THE NIH R21 EXPLORATORY/DEVELOPMENTAL GRANTS

Wednesday May 14, 2025 8-10am EST



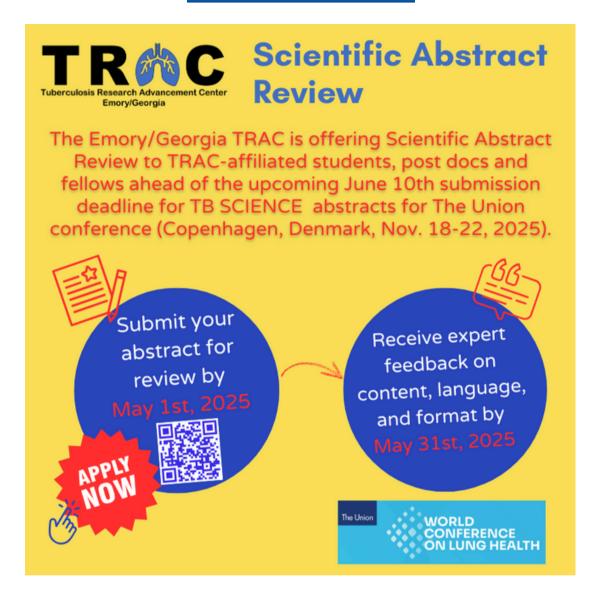
In-person & via Zoom

Register here!

**Janet Gross**, **PhD**, will lead a 2-hour workshop to review NIH R21 NIH Exploratory/Developmental Research Project Grant Funding Opportunities - R21 Clinical Trial Not Allowed (<u>PA-25-304</u>) and Clinical Trial Required (<u>PA-25-306</u>). The focus

will be on understanding the funding opportunity, and planning your grant proposal and research strategy. If you are interested in putting together a TB research proposal this workshop is geared to helping you prepare for a competitive application. TRAC Pilot Grant Awardees are encouraged to attend. **See flyer <u>here</u>**.

#### **Bulletin Board**



**ID**Week **2025** 

IDWeek will be coming to Atlanta, October 19-22, 2025. The **abstract submission portal** is open with a due date of May 1, 2025.



# International Workshop on CLINICAL PHARMACOLOGY OF TUBERCULOSIS DRUGS



The 16th edition of the International Workshop on Clinical Pharmacology of Tuberculosis Drugs will take place 8-9 July 2025 as a virtual meeting. This abstract-driven workshop has been the leading annual meeting in the TB pharmacology field since 2008. If you work in the field of TB, you are invited to join. This includes preclinical and clinical pharmacology researchers from academia and industry; medical doctors, pharmacists and pharmacologists involved in clinical management of TB patients; laboratorians, nurses, PhD students; and representatives from regulatory or non-governmental organizations active in the TB-field.

The program consists of oral presentations that will be put in perspective, with a translation to clinical care by selected experts at the end of each workshop session. In addition, there will be e-poster abstract presentations. The workshop is informal in setting and is meant to be interactive. **Abstract should be submitted by April 30, 2025**. More information can be found **here**.



Have items to include in a future newsletter?

Email:
lisa.sharling@emory.edu

#### **March Publications**

Goliath R, Wilkinson KA, Schutz C, **Meintjes G**, Shey MS. <u>Two distinct cytokine response clusters</u> <u>identified in healthcare workers with apparent resistance to infection with Mycobacterium tuberculosis despite sustained occupational exposure</u>. bioRxiv. 2025. DOI: 10.1101/2025.03.27.643001.

**Collins JM**, **Kipiani M**, Jin Y, **Sharma AA**, Tomalka JA, Avaliani T, Gujabidze M, Bakuradze T, Sabanadze S, Avaliani Z, **Blumberg HM**, **Benkeser D**, Jones DP, Peloquin C, **Kempker RR**. <u>Pharmacometabolomics in TB meningitis-Understanding the pharmacokinetic, metabolic, and immune factors associated with anti-TB drug concentrations in cerebrospinal <u>fluid</u>. PLoS One. 2025;20(3):e0315999. DOI: 10.1371/journal.pone.0315999.</u>

Ehrlich J, Suñer C, Churchyard G, Cobelens F, Hatherill M, Mendelsohn SC, **Nelson KN**, Scriba T, Theron G, Martinez L, Garcia-Basteiro AL. <u>Unveiling a hidden phenotype of early tuberculosis</u>. Lancet Respir Med. 2025. DOI: 10.1016/s2213-2600(25)00092-x.

Goletti D, Matteelli A, Cliff JM, **Meintjes G**, Graham S, Esmail H, Shan Lee S. <u>World TB Day 2025 Theme</u> <u>"Yes! We Can End TB: Commit, Invest, Deliver" can be made a reality through concerted global efforts to advance diagnosis, treatment and research of tuberculosis infection and disease</u>. Int J Infect Dis. 2025:107892. DOI: 10.1016/j.ijid.2025.107892.

Hailemariam TG, Ayele A, Gelanew T, Atnafu A, Brennan M, Tilahun M, Alemayehu DH, Debella ZA, Merid Y, Shibeshi W, Aseffa A, **Bobosha K**, Hirutu Y, Waddell SJ, Engidawork E. <u>Integrating genomic, transcriptomic, and phenotypic information to explore drug resistance in Mycobacterium tuberculosis sub-lineage 4.2.2.2.</u> J Appl Microbiol. 2025;136(3). DOI: 10.1093/jambio/lxaf063.

Harrison L, Velasquez GE, **Kempker RR**, Imperial MZ, Nuermberger E, Dorman SE, Ignatius E, Granche J, Phillips PP, Furin J, Yang E, Foley C, Chiambah S, Rogers R, Grack AV, Roa J, Shenje J, Nerette S, Kanyama C, Kyeyune RB, Mendoza-Ticona A, Murtaugh W, Foraida S, Goth M, Vernon A, Dooley KE, Savic RM. <u>ACTG A5409 (RAD-TB): Study Protocol for a Phase 2 Randomized, Adaptive, Dose-Ranging, Open-Label Trial of Novel Regimens for the Treatment of Pulmonary Tuberculosis.</u> Res Sq. 2025. DOI: 10.21203/rs.3.rs-5931694/v1.

Ismail N, Sirgel F, **Omar SV**, Omar S, de Kock M, Spies C, Folkerts M, Theron G, Engelthaler D, Metcalfe J, Warren RM. <u>Unpacking bedaquiline hetero-resistance: the importance of intermediate profiles for phenotypic drug-susceptibility testing.</u> bioRxiv. 2025. DOI: 10.1101/2025.03.09.642295.

Kgoadi K, Bajpai P, Ibegbu CC, Dkhar HK, Enriquez AB, Dawa S, **Cribbs SK**, **Rengarajan J**. <u>Alveolar macrophages from persons with HIV mount impaired TNF signaling networks to M. tuberculosis infection</u>. Nat Commun. 2025;16(1):2397. DOI: 10.1038/s41467-025-57668-y.

Mave V, Paradkar M, Conradie F, Gupta A, Avihingsanon A, **Meintjes G**, Turkova A, Dooley KE, Chaisson RE. <u>Tuberculosis disease among people with HIV: therapeutic advances.</u> Lancet HIV. 2025. DOI: 10.1016/s2352-3018(25)00040-2.

Meghji J, **Auld SC**, Bisson GP, Khosa C, Masekela R, Navuluri N, Rachow A. <u>Post-tuberculosis lung disease: towards prevention, diagnosis, and care.</u> Lancet Respir Med. 2025. DOI: 10.1016/s2213-2600(24)00429-6.

Mudoola D, Thekkur P, Nsonga J, Mande R, Berger SD, Turyahabwe S, Muchuro S, Namuwenge P, Sekadde M, Lukoye D, Luzze H, Dongo JP, **Date A**, Dlodlo RA, Ferroussier-Davis O, **Charles M**. <u>Case Finding Among and Comprehensive Management of Household Contacts of Persons with Pulmonary Tuberculosis: a Pilot Project - Uganda, 2023-2024</u>. MMWR Morb Mortal Wkly Rep. 2025;74(9):145-51. DOI: 10.15585/mmwr.mm7409a1.

**Naidoo K**, Zuma NY, Moodley M, Made F, Perumal R, Gengiah S, Ngozo J, Padayatchi N, Nunn A, Karim SA. <u>High mortality among patients with tuberculosis accessing primary care facilities: secondary analysis from an open-label cluster-randomised trial</u>. EClinicalMedicine. 2025;82:103151. DOI: 10.1016/j.eclinm.2025.103151.

Phillips PP, Peloquin CA, Sterling TR, Kaur P, Diacon AH, Gotuzzo E, Benator D, Warren RM, Sikes D, Lecca L, **Gandhi NR**, Streicher EM, Dianis N, Eisenach K, Mitnick CD, Horsburgh CR. <u>Efficacy and Safety of Higher Doses of Levofloxacin for MDR-TB: A Randomized Placebo-controlled Phase 2 Trial</u>. Am J Respir Crit Care Med. 2025. DOI: 10.1164/rccm.202407-1354OC.

Pillay K, Coetzer T, Connolly C, Pillay B, Chiliza T, **Naidoo K**, Sutherland J, Ndung'u T, Mayanja-Kizza H, Pillay M. <u>IgG antibody response to Mycobacterium tuberculosis curli pili (MTP) in people from different geographical regions in Sub-Saharan Africa.</u> Tuberculosis (Edinb). 2025;152:102634. DOI: 10.1016/j.tube.2025.102634.

Scheier TC, Tufa TB, Feldt T, Hardy Y, Minga A, Moh R, Damasceno A, Chambal L, Ntoumi F, Kades C, Bitunguhari L, Sebatunzi OR, Missanga M, Njekwa K, Muyoyeta M, Rangarajan S, **Meintjes G**, Mertz D, Eikelboom JW, **Wasserman S**. <u>Standard of care in advanced HIV disease: review of HIV treatment guidelines in sub-Saharan African countries-an extension study of eight countries.</u> AIDS Res Ther. 2025;22(1):39. DOI: 10.1186/s12981-025-00733-9.

Shrestha S, Cilloni L, Asay GRB, Kammerer JS, Raz K, Shaw T, Cilnis M, **Wortham J**, Marks SM, Dowdy D. <u>Model-Based Analysis of Impact, Costs, and Cost-effectiveness of Tuberculosis Outbreak Investigations, United States.</u> Emerg Infect Dis. 2025;31(3):497-506. DOI: 10.3201/eid3103.240633.

Sinha P, Bhargava M, Carwile ME, Dauphinais MR, Tisile P, Cintron C, Locks LM, Hauser J, Oliver M, Heysell SK, Mehta S, Finkelstein JL, Koura KG, **Cegielski JP**, Houben R, McQuaid CF, Bhargava A. <u>A roadmap for integrating nutritional assessment, counselling, and support into the care of people with tuberculosis</u>. Lancet Glob Health. 2025. DOI: 10.1016/s2214-109x(25)00021-x.

Sodeke O, **Shah NS**, Pals S, Riabokon S, Samsonova O, Mishara F, Doan I, Hetman L, Barzilay E, Podolchak N, Da Silva J. <u>Lower Tuberculosis Incidence Among People With Human Immunodeficiency Virus Who Completed Isoniazid Preventive Therapy in Ukraine, a High-Burden Multidrug-Resistant <u>Tuberculosis Setting: A Retrospective Cohort Study.</u> Clin Infect Dis. 2025. DOI: 10.1093/cid/ciaf069.</u>

Sossen B, Kubjane M, **Meintjes G**. <u>Tuberculosis and HIV coinfection: Progress and challenges towards reducing incidence and mortality.</u> Int J Infect Dis. 2025:107876. DOI: 10.1016/j.ijid.2025.107876.

Zaba MY, Neway S, Farrell D, Denion E, Perets V, Tilahun M, **Bobosha K**, Cassidy JP, Asmare A, Gordon SV. <u>Isolation and genetic analysis of mycobacteria from suspect tuberculous lesions in slaughtered cattle from Wolaita, Ethiopia.</u> Access Microbiol. 2025;7(3). DOI: 10.1099/acmi.0.000915.v3.



