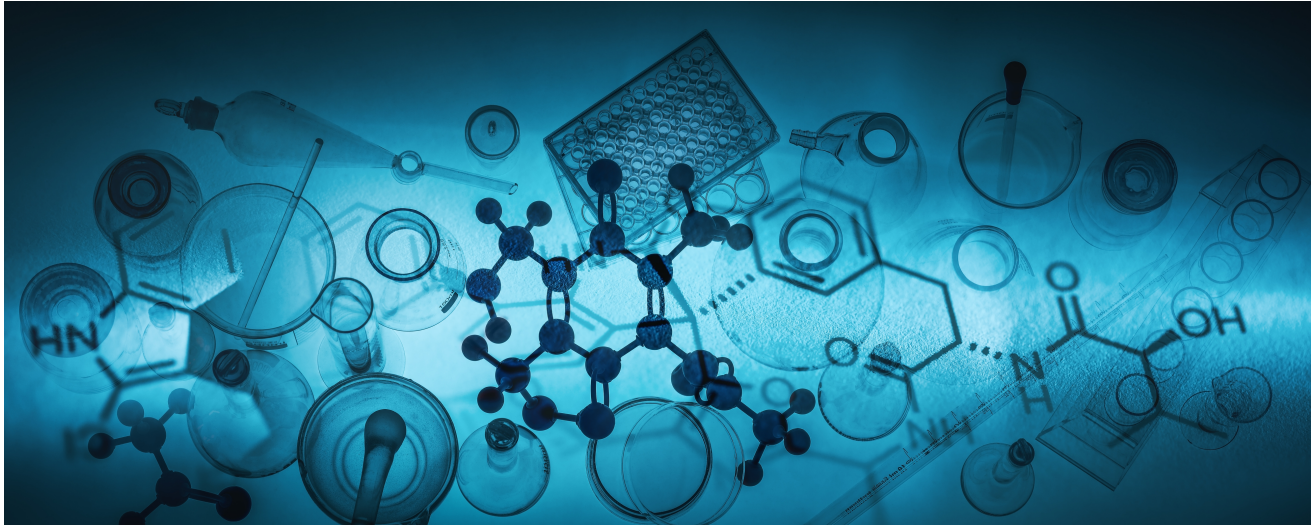


THE MONTHLY DOSE

Official Newsletter of The Mueller Health Foundation



WHAT'S NEW AT THE MUELLER HEALTH FOUNDATION:

We are continuing to work hard on the first of its kind blockchain-powered portal called **TBConnect** for networking and sharing data and research related to Tuberculosis! Lately, we've been exploring new cutting-edge incentive structures, such as non-fungible tokens (NFT), to reward our collaborators for their contributions in the future!

Stay tuned for more updates!

LATEST NEWS: OUR HEART GOES OUT TO THE PEOPLE OF INDIA

In recent months, the devastating effects of the COVID-19 pandemic have created a particularly dire situation in India. Hearing about the pain, loss, and suffering directly from our partners, supporters, and friends on the ground in India has made a deep impact on our hearts here at the Mueller Health Foundation.

However, we are not ones to stand idle and will continue our fight against infectious diseases alongside our partners by finding new solutions, increasing our efforts and level of engagement, and strengthening existing partnership and building new networks to do our part in fighting the world's deadliest diseases like COVID-19 and tuberculosis. It is our mission at the Mueller Health Foundation to stand committed to India, as well as the world, to save as many lives as possible!

For more news, please also take a look at our top 3 picks for May in this newsletter, where we highlight novel research findings and news around the prevention and treatment of tuberculosis around the world.

MHF TOP PICKS FOR MAY

Every month, we at the Mueller Health Foundation like to showcase interesting news and updates in the field of tuberculosis. Below are our top 3 picks for May:

1. An Unexpected Pandemic Side Effect In Peru: A Comeback For TB

A three-month lockdown due to Covid-19 followed by a 10-month restoration period of TB services could result in an additional 6.3 million cases and an additional 1.4 million deaths worldwide in the next five years, according to research from the Stop TB Partnership. In light of those dismal projections, some countries are looking for new ways to combat TB. Peru's Ministry of Health and Partners in Health plan to add to the fleet of TB Móvil units and to lean more expansively into the AI-driven diagnostic tools they carry.

You can access the full article at:

<https://www.npr.org/sections/goatsandsoda/2021/04/28/988742791/an-unexpected-pandemic-side-effect-in-peru-a-comeback-for-tb>

2. Tackling TB: A New Trial Is Asking How To Take Tuberculosis Tests To The People

Roughly two in five people newly ill with TB worldwide are never diagnosed. In South Africa, this amounts to about 120,000 to 160,000 people per year. Now, a new study called XACT III is testing ways in which more people can be diagnosed and started on TB treatment more quickly. The study, which started in March, will run until 2024.

The new tool called Gene Xpert (a DNA-based diagnostic test) used in the study now exists in a portable battery-operated format and through the use of these machines, the immediate turnaround time of the test is about 90 minutes, but the modules can be interlinked so several modules can be used at the same time, and this can be tailored to the specific demand in a particular setting.

Read the full article here:

<https://www.dailymaverick.co.za/article/2021-04-29-tackling-tb-a-new-trial-is-asking-how-to-take-tuberculosis-tests-to-the-people/>

3. Four-Month Rifapentine Regimen With Moxifloxacin Noninferior to Standard 6-Month Treatment Regimen for Drug Susceptible TB

Susan E. Dorman, M.D., from the Medical University of South Carolina in Charleston, and colleagues conducted an open-label, phase 3 trial involving persons with newly diagnosed pulmonary tuberculosis from 13 countries to compare two four-month rifapentine-based regimens to a standard six-month regimen consisting of rifampin, isoniazid, pyrazinamide, and ethambutol (control). A major result of the study published in the May 6 issue of the New England Journal of Medicine showed that a four-month rifapentine-based regimen containing moxifloxacin is noninferior to a standard six-month regimen for treatment of tuberculosis. This finding could ultimately lead to a shorter and more cost efficient treatment option for tuberculosis.

To learn more, read the full paper here:

<https://www.nejm.org/doi/full/10.1056/NEJMoa2033400>

DID YOU KNOW?

This month, we would like to highlight some interesting statistics related to the cost of treating TB in the United States.

In 2018 in the United States, the average cost for each patient to complete a treatment regimen for TB was as follows:

- The cost of treating drug sensitive TB was \$49,000.
- The treatment costs for multidrug resistant (MDR) TB averaged \$393,000.
- The treatment costs for extensively- drug resistant (XDR) TB averaged \$758,000.
- These estimates are only direct costs. Further, the cost to the individual patient depends on whether or not the patient has health insurance.

Source:

The Costly Burden of Drug-Resistant TB Disease in the U.S., 2018.

<https://www.cdc.gov/tb/topic/drtb/default.htm>