Considering New Diagnostics in the Fight to Manage AMR

Welcome to The AMR Global Health Academy Newsletter

July 2025

The AMR Global Health Academy serves the global health professional and antimicrobial steward in low- and middle-income countries with a free online educational curriculum designed to advance AMR knowledge and best practices. Every month, via the Newsletter, we share important updates from the AMR field, especially as it relates to AMR testing, diagnostics, and surveillance. We feature news stories, articles, events, resources, and AMR champions battling the real-world AMR problems.

The AMR Academy has numerous courses and educational activities designed to empower AMR stewards, particularly global health professionals from LMICs. We recently launched the first in our 2025 **AMR Problem Solving Case Study series** (available in English, French, Portuguese, and Spanish). You may be familiar with our case studies from **last year**. This year we are focusing on the community and journalism to drive action against AMR.

To join the AMR Global Health Academy, enroll in the Global Health Continuing Professional Development (GHCPD) free online AMR courses **here**.

AMR Global Health Academy Newsletter Editor

Dr. Lara Vojnov has now served as the AMR Global Health Academy Newsletter Editor for 18 months and under her leadership, we continue to see the quality and interest grow. Lara brings forth crucial topics and articles relevant to our members and works with our design team to support a dynamic, informative, and engaging newsletter.

Dr. Lara Vojnov was trained in Cellular and Molecular Pathology at the University of Wisconsin-Madison with a focus on HIV immunology and vaccinology. Since obtaining her PhD, she moved into global public health first as a Senior Scientist with the Clinton Health Access Initiative and later as the Diagnostics Advisor in the Global HIV, hepatitis, and STIs Programme at the World Health Organization. She brings

nearly 15 years of experience supporting country programs to expand access to diagnostic testing and improved health systems in resource-limited countries. During her time at the World Health Organization, she was seconded to the Health Emergencies team providing support during several outbreaks, including the COVID-19 pandemic. Lara has published over 60 peer-reviewed publications, including in the Lancet, Nature, PLoS Medicine, Journal of Interational AIDS Society, and several other scientific journals. She has lived in Canada, the US, South Africa, Liberia, Tanzania, and Switzerland and worked in a variety of settings including throughout East and Southern Africa, the Eastern Mediterranean, Eastern Europe, and Asia. Throughout her career, Lara has seen the significant impact of diagnostic tools on the management of antimicrobial resistance. Her most recent involvement during COVID has strengthened her commitment to promote awareness and support the AMR response.

News Story

New diagnostics under development: leveraging technology for AMR

Source: BBC News, Devon. A prototype of the lateral flow test for black fungus disease.

A recent BBC **article** highlighted a rapid diagnostic test that is under development for a deadly fungal infection, Mucormycosis. Researchers at the University of Exeter developed the prototype lateral flow test in an effort to expedite testing for rapid linkage to treatment. Fungal infections of Mucormycosis have increased in recent years, in part due to COVID-19 infections, poorly-managed diabetes, and over-use of steroids to control lung inflammation.

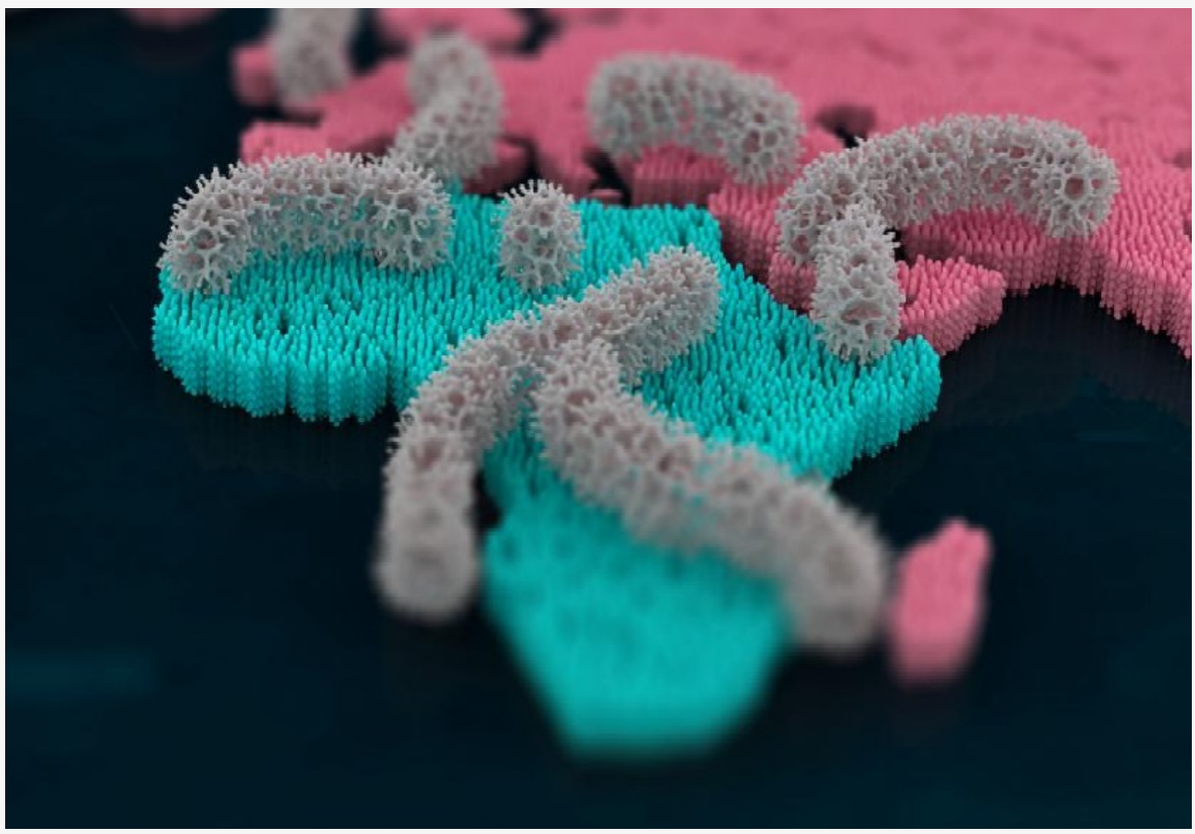
FIND recently released a technology **landscape** of point-of-care diagnostic products for anaemia for use at primary health centers, highlighting over 85 minimally invasive technologies in development or on the market. In recent years, diagnostic landscapes have been developed and published for a variety of diseases outside of HIV, tuberculosis, and malaria. In 2019, WHO

published the **landscape** of diagnostics against antibacterial resistance, gaps and priorities.

As new diagnostic innovations progress for both infectious and non-communicable diseases (and were accelerated by the COVID-19 pandemic), the diagnostics space can leverage those technological advancements to develop diagnostics for AMR that will support slowing the epidemic by ensuring the right treatments are provided at the right time.

Article Spotlight

Increasing AMR prevalence in Africa



PLoS Medicine recently published a **study** from the Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP) Study Group that looked at antimicrobial susceptibility data from 14 African countries. Nearly 200,000 bacterial samples were examined using antimicrobial susceptibility testing.

The study found that in 2018:

- Enterobacterales resistance to 3rd generation cephalosporins from 30.3% - 73.5%
- Enterobacterales resistance to carbapenems ranged from 1.0% - 49.6%
- *P. aeruginosa resistance to carbapenems ranged from 4.4% - 37.5%*
- Methicillin-resistance *S. aureus* (MRSA) ranged from 20.4% - 72.8%
- *Salmonella resistance to fluoroquinolone ranged from 1.8% - 40.0%*
- *E. coli resistance to 3rd generation cephalosporins ranged from 19.3% - 68.4%*
- *E. coli resistance to fluoroquinolones ranged from 27.6% - 65.3%*
- *Klebsiella pneumoniae resistance to 3rd generation cephalosporins ranged from 51.4% - 90.6%*

West (40.5%) and East Africa (42.5%) had the highest percentage of resistant isolates.

Of note, this study identified that large gaps remain in testing capacity and data volume and

quality across countries.

> *The reported inadequate number of bacteriology laboratories, lack of routine AST testing, predominance of paper-based documentation, and underreporting of clinical data undermine the ability to estimate regional and national AMR prevalence and drivers of resistance.*

This study highlights not only the expanding threat of AMR to the region, but also the significant need to improve testing access, laboratory capacity, and AMR surveillance.

Creating AMR Awareness

The **GHCPD platform** consistently presents new research and innovations in diagnostics and testing to drive AMR awareness.

In Case You Missed It

A newly established global AMR diagnostics collaboration (DxAMR) was launched by an inaugural organizing committee comprised of the Fleming Initiative, FIND, and GARDP. The global collaboration is aiming to build a coordinated and sustained response to AMR through equitable diagnostics access and implementation. See their **website** for more.

The Global AMR R&D Hub has an online dashboard that continuously collects and presents information on AMR R&D investments, products in the pipeline, and push and pull incentives for antibacterial R&D. See **here** for the dashboard.

An AMR Messaging Guide was developed by the United Nations Foundation. The Guide was created to help all stakeholders communicate the complexities of AMR and align on key messages to promote coherent policy and decisive action. See **here** for more.

WHO recently hosted a webinar introducing new WHO guidance on TB surveillance and its associated tools. See **here** for the webinar recording.

A side event at the 78th World Health Assembly brought together African health leaders and global partners to confront the rising threat of antimalarial drug resistance. See **here** for more.

Don't Miss

WHO published the AMR stewardship practical toolkit in 2019 and is planning its update. They are inviting participants to help inform the next version in a feedback survey. See the **English**, **French**, and **Spanish** surveys. The deadline for responses is 20 July 2025.

GARDP has two upcoming REVIVE webinars. The first on 22 July 2025 is entitled *Repurposing drugs to address the crisis of antimicrobial resistance* and the second on 9 September 2025 is entitled *Overcoming challenges of tuberculosis drug discovery and development*. See **here** for

more and to register.

The AMR Industry Alliance, through its Stewardship Prize initiative, aims to recognize established, innovative approaches to AMR stewardship in LMICs. The prize winner will be awarded 10,000 CHF. The deadline for submitting applications is 1 September 2025. See **here** for the eligibility criteria and application form.

The Global AMR Innovators Conference (GAMRIC) – previously the ESCMID-ASM Joint Conference on Drug Development for AMR – will be held 1 – 3 Oct 2025 in London, UK. See **here** for initial details. Registration opened on 5 May.

ICARe (Interdisciplinary Course on Antibiotics and Resistance) will be held 11-19 October 2025 in Annecy, France. See **here** for details. Applications will open in March.

IDWeek 2025, the annual meeting of the Infectious Diseases Society of America will be held 19-22 October 2025 in Georgia, USA. See **here** for details.

ASM Global Research Symposium on the One Health Approach to Antimicrobial Resistance (AMR), hosted in partnership with the Centre for Infectious Disease Research (CIDR) at the Indian Institute of Science (IISc) will be held 29-31 Oct 2025. See **here** for details.

The journal Antibiotics is planning for a special issue entitled, "Antibiotics: Utilization, Resistance, and Infection Prevention". The editors are inviting submissions for this special issue that addresses various aspects of AMR, including its mechanisms, transmission dynamics, and global impact. Manuscript submissions are due 31 October 2025. Please see **here** for more information.

World Antibiotic Awareness Week (WAAW) will be held 18-24 November 2025. As events are organized, details will be shared in upcoming newsletters.

The 10th AMR Conference 2026 will be held 3-4 March 2026 in Basel, Switzerland. Once available, details will be **here**.

2026 Gordon Research Conference (GRC), *Antibacterials of Tomorrow to Combat the Global Threat of Antimicrobial Resistance*, will be held 8-13 March 2026 in Tuscany, Italy. See **here** for more details.

ESCMID Global 2026, the annual meeting of the European Society for Clinical Microbiology and Infectious Diseases, will be held 17-21 April 2026 in Munich, Germany. See **here** for more.

What's Next

As new testing innovations emerge for infectious and non-communicable diseases, the field should leverage these to develop improved, accurate, and rapid tests in the fight against AMR.

Support for this initiative has been provided through an unrestricted educational grant from bioMérieux.