

# NEWSLETTER

APRIL 2026

04/2026



## Message from the Head of the Laboratory

"Dear colleagues and partners,

During the month of April, we witnessed strong mobilization of our teams around scientific, technical, and capacity-building activities, with particular emphasis on training and several initiatives aimed at strengthening genomic surveillance and the production of data useful for public health.

I commend the commitment, rigor, and professionalism of each and every one of you, which contribute daily to advancing our mission in service of the population."

*Amuri Aziza Adrienne*

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### Training at PGL/INRB on the validation of Electronegative Filtration (ENF) and Ceres concentration methods



The Pathogen Genomics Laboratory of INRB (PGL/INRB) organized, from April 7 to 17, 2026, a training session on the validation of ENF and Ceres concentration methods, led by Kristen Anderson, researcher at Biosurv International.

This training is part of capacity building for laboratory personnel, supporting epidemiological surveillance activities based on wastewater, thereby contributing to improved disease detection and prevention.

### Participation of PGL/INRB in the Comparative Public Health Architectures (ComPHA) 2026 workshop in Nairobi

Held from April 15 to 18, 2026, in Nairobi, the ComPHA workshop brought together African and international public health experts around a major issue: strengthening the impact of genomic surveillance data on health decision-making.

This initiative, led by leading scientific partners, aimed to optimize the use of antimicrobial resistance (AMR) data and wastewater genomic surveillance to guide public health policies.

The Pathogen Genomics Laboratory team, invited to this workshop, highlighted during a presentation the strategic role of genomic surveillance in epidemic management in the Democratic Republic of the Congo.

They also emphasized the innovative contribution of wastewater surveillance, enabling early detection of viruses such as poliovirus and mpox, even in the absence of clinical cases. These approaches enhance the speed and effectiveness of health responses, although logistical and technical challenges remain for sustainable scale-up.

### Participation of INRB in the Wastewater & Environmental Surveillance Meeting 2026 on wastewater surveillance



The Pathogen Genomics Laboratory of INRB (PGL/INRB) participated in the Wastewater & Environmental Surveillance Meeting (WES) 2026, held from April 14 to 15, 2026, in Accra. This conference brought together experts around wastewater surveillance as a strategic public health tool.

The active participation of INRB was particularly notable, illustrating the DRC's commitment to developing innovative solutions for the early detection of diseases such as cholera and mpox.

Discussions highlighted the need for stronger integration of environmental surveillance in Africa, supported by sustainable funding mechanisms, to strengthen prevention, early detection, and response capacities to health crises.

A key highlight of the conference was the award received by the INRB team following a panel showcasing the DRC's progress in environmental surveillance innovation. This distinction reflects the country's advancements in strengthening and integrating environmental surveillance into health monitoring systems.

## Participation of PGL - INRB in the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Global 2026



Professor Eddy Kinganda-Lusamaki represented the Pathogen Genomics Laboratory of the Institut National de Recherche Biomédicale (PGL/INRB) at the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Global 2026 congress, held in Munich, Germany (Messe München Congress Center) from April 17 to 21, 2026.

This congress brought together the international scientific community around recent advances in clinical microbiology, infectious diseases, and epidemiological surveillance. On this occasion, he presented findings on the sustained transmission of mpox clade I in the Democratic Republic of the Congo, highlighting the diversification of mpox viral lineages and their spread, as well as associated diagnostic and surveillance challenges.

These results underscore the need to strengthen continuous genomic monitoring to better understand viral evolutionary dynamics and guide response strategies at different levels.

## Capacity building in biobanking: training on ISO 20387 standard



As part of staff capacity strengthening, training focused on the ISO 20387 standard, relating to biobanking requirements, was held from April 20 to 22, 2026, at the Institut National de Recherche Biomédicale.

Focused on biobank management procedures, this session aimed to improve staff knowledge and skills in accordance with current international standards.

This training brought together the technical teams of the INRB biobank, service providers from the Pathogen Genomics Laboratory, and all staff with access to the biobank.

## Deployment of the mobile laboratory in Mbandaka for sequencing Mpox-positive samples



As part of genomic surveillance activities, a field mission was conducted in Mbandaka from April 7 to 14, 2026, by INRB teams within the Equateur provincial laboratory.

The main objective of this intervention was to carry out on-site sequencing of locally detected Mpox-positive samples using the portable Radione equipment.

During this mission, samples collected in 2026 were sequenced directly on-site, after which extracts were sent to INRB-Kinshasa for quality control (QC). The analyses performed generated important genomic data, contributing to a better characterization of circulating strains.

# APRIL IN PICTURES



Training on validation of ENF and Ceres concentration methods at the Pathogen Genomics Laboratory



Removal of boxes from cryogenic units for sorting on the bench in the work area



Preparation of master mix using the Radi Fast kit for PCR of Mpox samples



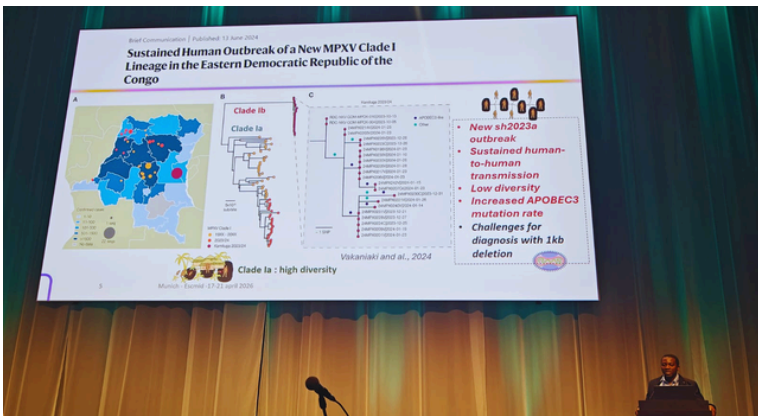
Working session during the WES 2026 conference in Accra



Intervention by a Pathogen Genomics Laboratory's member on accelerating outbreak response: wastewater genomics and the path toward 7-1-7, at the ComPHA 2026 workshop in Nairobi



Capacity building in biobanking: ISO 20387 training at the Institut National de Recherche Biomédicale



Presentation by Professor Eddy Kinganda at ESCMID Global 2026 in Munich



Group photo of participants and trainers during the CholGEN and advanced genomics workshop held in Nairobi

# OUR PARTNERS



## PUBLICATIONS : From January 1 to April 28, 2026

1. Mpox emergence, epidemiology, biology, clinical features and control (Nature reviews microbiology Avril 2026) <https://www.nature.com/articles/s41579-026-01305-y>
2. Detection of Marburg Virus Antibodies 25 Years After Outbreak in Watsa, Democratic Republic of the Congo- (JID mars 2026 ) <https://connect.uclahealth.org/dom/2026/03/16/detection-of-marburg-virus-antibodies-25-years-after-outbreak-in-watsa-democratic-republic-of-the-congo/>
3. Ocular manifestations in a cohort of patients with mpox in the Democratic Republic of the Congo 2007–2011 (ASM Journals Feb 2026) <https://journals.asm.org/doi/10.1128/asmcr.00171-25>
4. Deciphering the etiology of the 2024 outbreak of undiagnosed febrile illness in Panzi, Democratic Republic of the Congo (Nature Féb 2026) <https://www.nature.com/articles/s41591-026-04235-7>
5. Liver and bladder morbidity in a Schistosoma mansoni and haematobium co-endemic area in the Democratic Republic of Congo (PLOS Feb 2026) <https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0013999>
6. Maternal and neonatal outcomes after infection with monkeypox virus clade I during pregnancy in DR Congo: a pooled, prospective cohort study. ( The Lancet Jan 2026) [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(25\)02309-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(25)02309-8/fulltext)
7. Determinants of long-term SARS-CoV-2 immune responses in asymptomatic-to-moderate COVID-19 patients in sub-Saharan Africa (Springer Nature Jan 2026) <https://link.springer.com/article/10.1186/s12916-025-04607-9>
8. Mpox Clade IIb Virus Introduction into Kinshasa, Democratic Republic of the Congo, July 2025 (Viruses Jan 2026) <https://www.mdpi.com/1999-4915/18/1/87>

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