

# Direct PCR as an alternative platform to conventional PCR

🕒 9am-10:20am (PHT/SGT) 📅 28<sup>th</sup> May 2021

Organised by ASEAN Dx Initiative

Rising COVID-19 testing demands have burdened the existing testing methodologies and facilities. This resulted in the development of alternative PCR protocols with similar sensitivities. To focus on the lessons learned and contribute to capacity building in ASEAN, we had the first webinar of ASEAN Dx preparedness series on 28<sup>th</sup> May 2021. These efforts are directed towards generating impactful conversations with clinical and community stakeholders to help bridge diagnostics knowledge gaps.

## Speakers:

1. **Dr Kristine Alvarado-Dela Cruz** **Pediatrics**, Infectious Diseases, Head of Microbiology, Research Institute for Tropical Medicine, Philippines
2. **Dr Eric Vail** - Director, Molecular Pathology, Cedars-Sinai Medical Centre, United States
3. **Dr Wong Mun Yew** – CEO & Founder, Asia Genomics, Singapore
4. **Dr Joseph Yao** - Associate Professor, Laboratory Medicine and Pathology, Mayo Clinic, United States

## Moderator:

**Dr Benedict Yan**, Pathologist and Director, Molecular Diagnostics Centre, National University Health Systems, Singapore.

## ASEAN Dx Initiative chairs:

**Dr Sidney Yee**, CEO, DxHub, Singapore & **Dr Jamie Montoya**, Executive Director, Council for Health Research and Development, Philippines (PCHRD).



**645**  
registrations



**432**  
attendees



**13**  
Countries

BN, GB, ID, IN, JP, KH, MM, MY, PH, SG, TH, US, VN



**88%**  
From SG and PH



**37**  
questions asked

## Poll Results (200 votes):

- 80% use conventional RT-PCR and 23% use Direct PCR
- 74% voted for awareness and training to build up diagnostics capacity in their country
- Funding (54%) and Access to equipment and reagent (54%) are the main challenges faced when implementing testing options
- Top three topics of interest for future webinars
  - 58% are interested in updates on vaccine and immunology for the next webinar
  - 56% voted for Upcoming technologies for infectious diseases
  - 51% voted for NGS for variant surveillance



## Highlights from the webinar

- According to Dr Kristine, RITM (Research Institute for Tropical Medicine) and NRLs (National Reference Laboratories) in Philippines responded to COVID-19 emergence and came up with ways to detect the virus. However, only 60 of the 257 COVID-19 PCR testing laboratories utilize “cartridge-based” PCR method. No use of direct-PCR has surfaced yet in Philippines.
- NAAT (nucleic acid amplification test) for SARS-CoV-2 detection differ in specimens accepted, workflow complexity, and sensitivity (Dr Yao).
- Detection rate depends on timing of specimen collected in relation to symptom onset, quality of specimen, specimen transport and storage conditions (Dr Yao).
- Close communication with the performing laboratories is ongoing to learn about assay performance and nuances (Dr Yao).
- In Dr Vail’s experience, Direct PCR stood out compared to normal PCR in terms of efficiency and performance. Thus, it proved to be very beneficial for him and the people in his laboratory.
- Like the experience of Dr Vail, Dr Wong is also very confident and satisfied with the direct PCR (Resolute) test.
- Awareness about direct PCR is being raised regionally but much more needs to be done to fuel its adoption in AMS.
- In Dr Montoya’s opinion, the ideal test for patient care or surveillance should be simple, rapid, reliable, easy to interpret and easily correlated by clinicians.
- Thus, focus on innovation, speed and execution in addition to embracing change are key to prepare for next pandemic.

## Watch the webinar:

<https://tinyurl.com/aseandxDPweb>