AGHAM AT KAALAMAN PARA SA BAYAN!

OUR RESPONSE TO COVID-19

PAASE BULLETIN # 15

ON PAASE STRATEGIC ACTION GROUP 3: MASS TESTING & FAST-TRACKING

Addressed to: DOH, RITM, RT-PCR testing centers, DTI, private donors

INCREASING RT-PCR TESTING CAPACITY FOR COVID-19

Early in the rise of COVID-19 cases in the world, PAASE committed to help significantly increase COVID-19 testing capacity in the Philippines. We realized this as the most critical measure to be taken to identify infected individuals and their contacts, prioritize them for triage and treatment, assess outcomes of treatment, and monitor transmission and spread of the virus. (1)

PAASE advocated the use of only high quality RT-PCR kits validated by DOH RITM and referenced to the standard WHO Kit following the Berlin protocol. (2)

PAASE has an outstanding offer to help all RT-PCR testing centers in procuring the following:

1. RNA Extraction kits in bulk, for centers that will use RT-PCR kits that are incomplete, i.e., lack RNA Extraction component, e.g., (3)
2. Automated RNA Extraction machines, to increase the throughput of this critical step and speed up RT-PCR results, e.g., (4)
3. Mini BSL2 biosafety cabinets called containment barrier isolators, to ensure containment during deactivation of the human samples and biosafety of workers, e.g. (5)

PAASE offered to help DOH RITM, UP NIH and other prospective centers on the above, and is currently exploring potential donors of RNA Extraction kits from the private sector.

PAASE has also expressed support for the following:

1. certificated training of UP molecular biology faculty and researcher volunteers in RITM and cascading training to more volunteers - an effort led by Dr. Reynaldo García of UPD NIMBB
2. certification of the UP PGC (Philippine Genome Center) as a RT-PCR testing center - an effort led by PGC Dir. Dr. Cynthia Saloma

Further, PAASE has championed the purchase by DOH of RT-PCR Cepheid all-in-one cartridges that are run exclusively on GeneXpert machines because there are 450 such machines located in DOH TB DOTS Centers all over the country, and RT-PCR results are produced in 45 min. (6)

In this connection, PAASE members in certain regions of the country are preparing to assist the DOH TB DOTS personnel (7) by:

1. making direct contact with them
2. linking up DOH TB DOTS Centers with nearby hospitals and clinics
3. holding joint online review of protocols and training on the GeneXpert machines and Cepheid kit protocols.

The initial offer to help DOH in increasing RT-PCR testing capacity was communicated in a letter sent to DOH Sec. Francisco T. Duque III on March 19, 2020. It included a proposed COVID-19 testing workflow with expansion to the regions, large-scale COVID-19 diagnostic testing with
training, and procurement of validated components in bulk to produce an inexpensive DOH RITM Kit referenced to the WHO Kit.

References:
2. https://www.who.int/docs/default-source/coronaviruse/protocol-v2-1.pdf?sfvrsn=a9ef618c_2
6. PAASE Bulletin # 5: DOH T8 DOTS testing centers for COVID-19
7. PAASE Bulletin # 1: COVID-19 pilot testing center

Prepared by:
Gisela P. Concepcion, gpconcepcion@gmail.com;
Pia Bagamasbad, piab@mbb.upd.edu.ph;
Homer Pantua, pantuah@gmail.com;
Vic Ilag, vilag2001@yahoo.com;
Larry Ilag, larry.ilag@gmail.com;
Gonzalo Serafica, gonzaloserafica@gmail.com