Press Release
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New cutting-edge biobank to expand Cancer research in PH

The University of the Philippines (UP) and other Philippine universities can now do high level research for cancer cure with the inauguration of the Cancer Phenome-Biobanking System and Biomonitoring Program or the Biobank facility at the Philippine General Hospital on February 18, 2019.

The Biobank project is a joint initiative of the UP and the University of California-San Francisco (UCSF) funded through the CHED Philippine-California Advanced Research Institutes (PCARI) through the Institute for Health Innovation and Translational Medicine (IHITM).

PCARI is a project by the Commission on Higher Education (CHED) which brings together top scientists, researchers and faculty of Philippine universities and the University of California to do joint research, faculty exchanges, scholarships and training on issues and problems facing the country.

Biobanking refers to the process of collecting samples of biological specimens such as cells and tissues to aid researchers to better understand a certain disease and help in developing drugs.

“A biobank extends beyond the function of being a long-term storage and conservation facility for biological specimens. In other countries, such facilities have contributed to pioneering medical advances, including precision medicine—a method which allows a clinician to tailor a specific treatment for a particular patient. Initiatives such as this largely impacts our country’s health system,” said CHED Chairman J. Prospero E. De Vera III.

The Duterte administration continues to fund higher education at levels never before done by any administration.

This project is one of the many investments of the government on health research and innovation. CHED continues to encourage higher education institutions (HEIs) to conduct researches that will provide solutions to health problems that affect the lives of Filipinos. So many Filipinos continue to die from cancer. We need research to provide solutions such as identifying products we should avoid or regulate, lifestyle changes we should do, or helping find a cure for cancer.

Chairman De Vera also added this project will produce data that will help policy makers to ensure a safer environment for Filipinos. “Universities must help provide evidence-based policy recommendations to government agencies such as the Department of Health or guide Congress in its enactment of new laws.

“Universities must do all these in a collaborative manner so they can harness the expertise in a cost effective manner,” he added.

Cancer is one of the top three killer diseases in the country, according to the 2016 data of the Philippine Statistics Authority (PSA). The report says more Filipino women die from Cancer, listing as many as 30,954 annual cases. Among the types of Cancer, Breast Cancer has the highest incidence rate in the Philippines among Asian countries.

Cancer is treatable, but the efficacy of treatment and the ability to recover from the disease may vary from patient to patient. In addition, patients from developing countries such as the Philippines, where 21.6% of the population are below the national poverty line according to the PSA, are faced with the burden of paying for the high cost of drugs, surgeries, and chemotherapy/ radiotherapy.

The high mortality rate in the country calls for new and better diagnostic methods and therapeutic interventions. However, Philippine researchers have limited access to human specimens, particularly Filipino cancer cell lines.

The new biobank will house data on Cancer type, blood analysis, pathologic data, and other relevant patient information without compromising patient confidentiality. For its initial cycle, the project will focus on endometrial, breast, and ovarian cancers commonly affecting women.

“This will have two components. The human cell repository system will involve isolation and culturing of cancer cells from Filipino patients. Information will be stored in an online database which medical professionals and researchers can use for testing and developing new drugs. The biomonitoring project, on the other hand, will involve sampling of Filipino individuals and analyzing whether exposure of patients to certain chemicals is associated with higher risk of developing cancer,” said the project leader Dr. Michael C. Velarde. The UP Professor, who has a long standing interest in cell proliferation, also extends his research focus on the role of endocrine disruptors in hormone-related cancers among Filipinos.

Dr. Velarde added that while cancer is a genetic disease, there are external factors that also drive cancer progression. Examples of these are endocrine disrupting chemicals (EDCs) found in agricultural pesticides, commercial food packaging, and many household and personal care products, including anti-bacterial soaps, toothpaste, cosmetics, plastic bottles, kids’ toys, and PVC plastics.

J. PROSPERO E. DE VERA III, DPA
Chairman
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