Republic of the Philippines
OFFICE OF THE PRESIDENT
COMMISSION ON HIGHER EDUCATION
Region 02

CHEDRO 2
RELEASED
Date: 06/19/23
Signature:

REGIONAL MEMORANDUM
No. 154, series of 2023

FOR : **ALL PRESIDENTS/HEADS/OFFICERS-IN-CHARGE OF PUBLIC AND PRIVATE HIGHER EDUCATION INSTITUTIONS (HEIs) IN REGION 2**

SUBJECT : **IN VITRO DISEASE MODELING AND NATURAL PRODUCTS TRAINING WORKSHOP TENTATIVELY SCHEDULED ON JUNE 19–23, 2023 AT THE INSTITUTE OF BIOLOGY, UNIVERSITY OF THE PHILIPPINES, DILIMAN, QUEZON CITY**

DATE : **JUNE 14, 2023**

Attached for the information and participation of all interested parties is a copy of the Memorandum of CHED Chairperson **Dr. J. Prospero E. De Vera III** inviting HEIs to participate in the abovementioned activity.

Registration and other queries may be directed to the Mammalian Cell Culture Laboratory through telephone number **028 981 8500 local 3729** or email at **mccl.upd@upd.edu.ph**.

ATTY. MARCO CICERO F. DOMINGO
OIC-Director IV

Encl.: as stated

Give us feedback: **bit.ly/CHEDRO2CSM**

:drd/2023.0614a.22583 | RM 153 - Participation in In Vitro Disease Modeling and Natural Products Training

Republic of the Philippines
OFFICE OF THE PRESIDENT

COMMISSION ON HIGHER EDUCATION

CHED RO2 22583 RECEIVED DATE: 9-14-23 SIGNATURE

MEMORANDUM FROM THE OFFICE OF THE CHAIRPERSON

TO : **PRESIDENTS/HEADS OF HIGHER EDUCATION INSTITUTIONS**

SUBJECT : **PARTICIPATION OF HIGHER EDUCATION INSTITUTIONS IN THE *IN VITRO* DISEASE MODELING AND NATURAL PRODUCTS TRAINING WORKSHOP TENTATIVELY SCHEDULED ON 19-23 JUNE 2023 AT THE INSTITUTE OF BIOLOGY, UNIVERSITY OF THE PHILIPPINES DILIMAN**

DATE : **7 JUNE 2023**

In accordance with the pertinent provisions of Republic Act (R.A.) 7722, otherwise known as "*Higher Education Act of 1994*", this Office hereby endorses the above undertaking organized by the CHED-PCARI Project titled "IHITM 2018-033: Joint Project for Disease Modeling and Developing Novel Therapeutics: Initial Focus on Acute Myocardial Infarction, and Blood Calibration" of the Mammalian Cell Culture Laboratory at the Institute of Biology, University of the Philippines Diliman.

The workshop is open to all interested students (undergraduate and graduate), academicians (teachers/faculty and staff), and researchers from different higher education institutions across the Philippines. The primary objective of this training workshop is to enhance the participant's skills and knowledge through hands-on and lecture activities focusing on various topics, including basic cell culture techniques, bioassays, molecular biology techniques, natural products extraction/testing, and *in silico* analysis.

Participation in the workshop is VOLUNTARY. Registration and other queries may be directed to the Mammalian Cell Culture Laboratory through 8981-8500 local 3729 or mccl.upd@up.edu.ph.

Wide dissemination of this Memorandum is desired.

J. PROSPERO E. DE VERA III, DPA
Chairman
Commission on Higher Education

PROGRAM

Monday		
9:00 AM-9:05 AM	National Anthem (Liz/Isay)	
9:05 AM-9:20 AM	Opening Remarks (Sir Ahmad)	
9:20 AM-9:30 AM	Opening Remarks (IB Director)	
9:30 AM-10:15 AM	Lecture: *In vitro* disease modeling thru cell culture (Sir Javier)	
10:15 AM-12:00NN	Lecture: Natural products for health research (Jen)	
12:00NN-1:00 PM	Lunch Break	
1:00 PM-3:00 PM	Batch 1: Passage/Seeding for MTT/IF/RNA (Jen/Liz)	Batch 2: Natural Product Extraction (crude) (Vincent/Jeff)
3:00 PM-5:00 PM	Batch 1: Natural Product Extraction (crude) (Vincent/Jeff)	Batch 2: Passage/Seeding for MTT/IF/RNA (Jen/Liz)
Tuesday		
9:00 AM-10:30 AM	Batch 1: Treatment of seeded cells (Control, Crude extract, Doxorubicin) (Liz/Maevel)	Batch 2: Phytochemical Analysis Part 1 (Vincent/Jeff)
10:30 AM-12:00NN	Batch 1: Phytochemical Analysis Part 1 (Vincent/Jeff)	Batch 2: Treatment of seeded cells (Control, Crude extract, Doxorubicin) (Liz/Maevel)
12:00 PM-1:00 PM	Lunch Break	
1:00 PM-3:00 PM	Lecture: *In Silico* – Differential Gene Expression Analysis (James)	
3:00 PM-5:00 PM	Lecture: *In Silico* – Molecular Docking (Vincent)	
Wednesday		
9:00 AM-9:45 AM	Lecture: Molecular Biology Techniques (Sir Javier)	
9:45 AM-1:00 PM	Batch 1: RNA Extraction and NanoDrop (James/Conrad)	Batch 2: Phytochemical Analysis Part 2 (Vincent/Jeff)
1:00 PM-2:00 PM	Lunch Break	
2:00 PM-5:00 PM	Batch 1: Phytochemical Analysis Part 2 (Vincent/Jeff)	Batch 2: RNA Extraction and NanoDrop (James/Conrad)
Thursday		
9:00 AM-11:00 AM	Batch 1: RNA to cDNA conversion (Maevel/Conrad)	Batch 2: HPLC analysis (Jeff/Patty)
11:00 AM-12:00NN	Batch 1: Preparing cDNA for qPCR (Jen/Maevel)	
12:00NN-1:00 PM	Lunch Break	
1:00 PM-3:00 PM	Batch 2: HPLC analysis (Jeff/Patty)	Batch 2: RNA to cDNA conversion and loading in qPCR (Maevel/Conrad)
3:00 PM-4:00 PM		Batch 2: Preparing cDNA for qPCR (Jen/Maevel)
Friday		
9:00 AM-12:00 PM	Batch 1 and 2: MTT Assay, Immunostaining, and Fluorescence Imaging (Jen/Maevel)	
12:00 PM-1:00 PM	Lunch Break	
1:00 PM-4:00 PM	Lecture: Analysis of qPCR data, MTT data, and fluorescent images (Jen)	
4:00 PM-4:30 PM	Awarding of Certificates (Isay)	
4:30 PM-4:45 PM	Closing Remarks (Sir Ahmad)	
4:45 PM-5:00 PM	Photodocumentation of Event (Isay)	

Master of the Ceremony:

Mariel Lizbeth Joy Agsaoay / Anna Isabel Navarro