

# TRANSCRIPTOMICS WORKSHOP

## **From Experimental Design to Downstream Analysis and Insights Generation**

In collaboration with:

Codon Genomics

## **SPEAKERS**



**Prof Hoh Boon Peng** Professor, School of Health Sciences, IMU University

Ts Dr Yeannie Yap Hui Yeng Senior Lecturer, School of Health Sciences, IMU University



A/Prof Goh Hoe Han Deputy Director, INBIOSIS, UKM



Dr Lee Wei Kang Vice President, Application Sciences, Codon Genomics



**Dr James Liew Kok Jun** Senior Bioinformatician, Codon Genomics



DATE | 26 - 28 November 2024, Tuesday - Thursday TIME 8:30am – 5:30pm VENUE | IMU University (Formerly known as International Medical University) Bukit Jalil, Kuala Lumpur, Malaysia

Transcriptomics has, in recent years, emerged as a popular topic in biological research and real-world applications. With the revolution in next-generation sequencing (NGS) and bioinformatics, RNA sequencing (RNA-Seq) provides a high-throughput, high-sensitivity, and high-resolution technique that empowers high-impact research from single-cell, spatial to genome-wide association study. In this workshop, participants will gain insights into the application and practical workflow approaches for transcriptomics analysis. We will cover basic experimental design for RNA-Seq data analysis, including the use of various analytical tools, relevant file formats, reference genomes, transcriptome annotations, quality control measures, reference-based alignment, gene expression, and differential gene and isoform analyses. Hands-on exercises will be provided for participants to practice using complete analytical pipelines and computing resources on test datasets. The use of Artificial Intelligence (AI) and Machine Learning (ML) in connecting transcriptome information to environment parameters, nutrition, agricultural and clinical outcomes will also be covered.

#### **EXTRA BENEFITS:**

**FREE admission to Pre-workshop** Webinar

**FREE 1-to-1 Genomic Clinic** Consultation during workshop

**FREE 1-month Post-workshop** Consultation

#### **OBJECTIVES**

- · To describe the basic experimental design and workflow approaches for transcriptomics analysis.
- · To apply bioinformatics software and tools in analysing RNA-Seq data.
- To interpret and annotate data with functional information.

#### REGISTRATION EEE (inclusive of SST)

Regular RM2500

IMU Staff / Alumni / Student (Non-IMU) RM1750

IMU Student RM1250

## **CONTACT US**

SECRETARIAT **1** +603 2731 7669 / 7668 / 7331 E icl@imu.edu.my

More information and online registration available at www.imu.edu.my/icl





REGISTRATION	FORM						
SURNAME / LAST NAM	IE:						
FIRST NAME:						NATIONALITY:	
GENDER: MALE	FEMALE	TITLE:	MRS	MS	PROF DR	OTHER:	
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Please indicate whether this is your office or home address: ORGANISATION HOME							
EMAIL:							
ORGANISATION'S WEBSITE (IF ANY):							
ARE YOU AN IMU ALUMNI MEMBER? YES NO							
DIETARY NEEDS/PREFERENCE: VEGETARIAN NON-VEGETARIAN							
REGISTRATION FEE							
Regular: RM2500 IMU Staff / Alumni / Student (Non-IMU): RM1750 IMU Student: RM1250							
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ONLINE* ( www.imu.edu.my/icl through iPay88)							
CANCELLATION							
,	registration must be made in v Workshop - from experiment	5			here will be a 30% 2 November 2024.	refund of registration fee for cancellation made before	
analysis and insights generation. 5. There will be no refund of registration fee for cancellation made on 12							
<ol> <li>There will be full refund of registration fee for cancellation made by 26 September 2024.</li> <li>November 2024 and thereafter.</li> <li>The Organiser reserves the right to cancel or change the topic or trainer or</li> </ol>							
•	% refund of registration fee for	cancellation m	ade before	tł	ne workshop, if for w	whatever reasons beyond its control, the workshop cannot of the topics need to be altered.	

### DECLARATION AND AUTHORISATION

Signature

- 1. I confirm that the above information is correct and I will inform IMU when there is any change to this information.
- 2. I have read, understood and consent to the processing of my personal data as set out in the enclosed Privacy Notice.

Date

#### DISCLAIMER:

The organiser reserves the right to make such alterations to the programmes as circumstances dictate and will not accept responsibility for any errors, omissions or changes made to the speakers' information. The views and opinions expressed by the speakers at this workshop are not necessarily the views and opinions of the organiser.



Centre for Lifelong Learning TRANSCRIPTOMICS WORKSHOP - FROM EXPERIMENTAL DESIGN TO DOWNSTREAM ANALYSIS AND INSIGHTS GENERATION

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