



The 4th Vietnam School of Biology (VSOB4)

Bioinformatics Course:
Metagenome Analysis in One Health Practice – From 16S to Shotgun

ICISE, Quy Nhon City, Binh Dinh province, Vietnam
Sep 3rd -6th, 2025

PROGRAMME

Day 1: Wednesday, Sep 3 rd , 2025		
7:30 – 8:30	Course registration and informal introductions	<i>ICISE, Quy Nhon City</i>
8:30 – 9:00	Welcome address Introduction of trainers and participants, group photo	Dr. Tran Thanh Son, ICISE, Quy Nhon City Assoc.Prof.Dr. Nguyen Bao Quoc, Nong Lam University, HCMC
9:00 – 9:15	Introduction of course work and practical	Dr. Cuong Nguyen, LOBI Vietnam Ltd., Insitute of Information Technology, VAST
9:15 – 10:00	Keynote 1: Introduction to Metagenomics and Applications in Agriculture	Prof. Dr. Truong Nam Hai Institute of Biology, Vietnam Academy of Science and Technology
10:00 - 10:20	<i>Tea break</i>	
10:20 – 11:05	Lecture 1: Metagenomics library preparation	Dr. Nguyen Thuy Vy University of Sciences, Vietnam National University, HCMC
11:05 – 11:50	Keynote 2: Analysis of Gut Microbiome, Structure and Function in Vietnamese Adults	Dr. Nguyen Thuy Vy University of Sciences, Vietnam National University, HCMC
11:50 – 13:30	<i>Lunch break</i>	<i>ICISE, Quy Nhon City</i>
13:30 – 17:30	Lecture 2: Shotgun Metagenomics Analysis	Pham Quang Huy, PhD candidate Kyungpook National University, Korea
Day 2: Thursday, Sep 4 th , 2025		
8:30-11:30	Lecture 2: Shotgun Metagenomics Analysis (cont')	Pham Quang Huy, PhD candidate Kyungpook National University, Korea

11:30 – 13:30	Lunch break	ICISE, Quy Nhon City
13:30-17:30	Lecture 2: Shotgun Metagenomics Analysis (cont')	Pham Quang Huy, PhD candidate Kyungpook National University, Korea
Day 3: Friday, Sep 5th, 2025		
8:30 – 11:30	Lecture 3: 16S rRNA Amplicon Analysis	Dr. The-Hao Chung OUCRU, Ho Chi Minh City
11:30 – 13:30	Lunch break	ICISE, Quy Nhon City
13:30 – 17:30	Lecture 3: 16S rRNA Amplicon Analysis (cont's)	Dr. The-Hao Chung OUCRU, Ho Chi Minh City
Day 4: Saturday, Sep 6th, 2025		
8:30 - 9:30	Keynote 3: Inter-woven world of Microbes: Transcriptionally Active Microbes and Disease Severity	Assoc. Prof. Dr. Rajesh Pandey CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB), India Academy of Scientific & Innovative Research (AcSIR)
9:30 - 10:00	Talk: Identifying fecal microbiota signatures of colorectal cancer in a Vietnamese cohort	Dr. Tran Thi Thanh Tam USTH, Hanoi, Vietnam
10:00 - 10:30	Tea break	
10:30 - 12:00	Participant Talks: Sharing from the Field	Moderator: Dr. Cuong Nguyen, LOBI Vietnam Ltd., Insitute of Information Technology, VAST Presenters: Registered participants
11:30 – 13:30	Lunch break	ICISE, Quy Nhon City
13:30-17:00	Lecture 4: Data Visualization with R	Dr. Cuong Nguyen, LOBI Vietnam Ltd., Insitute of Information Technology, VAST
17:00-17:30	Closing and Certificate ceremony	All participants

Lecture 2 in this course will be conducted on the Galaxy Platform, supported by TlaaS, Galaxy Australia.

