



The 4<sup>th</sup> 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 3<sup>rd</sup> -6<sup>th</sup>, 2025*

**PROGRAMME**

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

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

Lecture 2 in this course will be conducted on the Galaxy Platform, supported by TIaaS, Galaxy Australia and LOBI CBAS Server.

