



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 | | |
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| 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 |

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| 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 |