

Student Science Training Program 2026 Batch 2

29 June –10 July 2026

Day 1 (Monday, June 29, 2026)

- 08:30–09:00 Welcome and Introduction
Prof. Dr. Banthit Chetsawang
- 09:00–10:00 Lecture and Demonstration: Laboratory Safety Practices
Asst. Prof. Dr. Sirirat Kumarn
- 10:00–11:00 Overview Lecture: Polymerase Chain Reaction (PCR) and Fluorescent Protein Technology
Assoc. Prof. Dr. Chalongrat Noree
- 11:00–12:00 Laboratory session on Basic Pipetting Technique
Laboratory session on DNA Cassette Preparation by PCR
Assoc. Prof. Dr. Chalongrat Noree, Dr. Phattarunda Jaree, Dr. Wannapa Sornjai, Dr. Nattaya Srisawad, Dr. Supajit Sraphet, Dr. Chonticha Saisawang, Ms. Naraporn Sirinonthanawech and team
- 12:00–13:00 Lunch
- 13:00–16:00 Laboratory session on Agarose Gel Electrophoresis for Checking the Amplified DNA Cassette
Laboratory session on PCR Purification
Laboratory session on Preparation of Overnight Yeast Culture
Assoc. Prof. Dr. Chalongrat Noree and team

Day 2 (Tuesday, July 30, 2026)

- 09:00–09:30 Laboratory session on Preparation of Log-Phase Yeast Culture
Assoc. Prof. Dr. Chalongrat Noree and team
- 09:30–11:00 Overview Lecture: PCR-Based Yeast Genome Engineering
Assoc. Prof. Dr. Chalongrat Noree
- 11:00–12:00 Computer Lab: Plasmid Construction and Primer Design
Assoc. Prof. Dr. Chalongrat Noree and team
- 12:00–13:00 Lunch
- 13:00–16:00 Laboratory session on Preparation of Competent Yeast Cells and Yeast Transformation
Assoc. Prof. Dr. Chalongrat Noree and team

Day 3 (Wednesday, July 1, 2026)

- 09:00–09:30 Laboratory session on Replica Plating for Selecting Yeast Transformants
Assoc. Prof. Dr. Chalongrat Noree and team
- 09:30–12:00 Laboratory session on Colocalization Assay (Confocal Imaging of Yeast Samples)
Assoc. Prof. Dr. Chalongrat Noree and team
- 12:00–13:00 Lunch
- 13:00–14:30 Recap and Discussion
Assoc. Prof. Dr. Chalongrat Noree and team

14:30 – 16:00 Campus Tour
*Ms. Panutchanat Khamtonwong, Ms. Pinjutha Ratchatamethawin and
Mr. Yarnyong Kongmahaphuk*

Day 4 (Thursday, July 2, 2026)

09:00 – 10:00 Lecture on “Thalassemia”
Dr. Kittiphong Paiboonsukwong

10:00 – 12:00 Laboratory session on “DNA Analysis for Alpha-Thalassemia”
*Dr. Thongperm Munkongdee, Dr. Kittiphong Paiboonsukwong,
Asst. Prof. Dr. Natee Jearawiriyapaisarn, Asst. Prof. Dr. Phatchariya Phannasil,
Dr. Benjaporn Kiatpakdee, Ms. Nattrika Buasuwan, Ms. Usa Nuttapolwat and team*

12:00 – 13:00 Lunch

13:00 – 16:00 Laboratory session on “DNA Analysis for Alpha-Thalassemia” (cont.)
Dr. Thongperm Munkongdee and team

Day 5 (Friday, July 3, 2026)

09:00 – 10:30 Lecture on “Plant Tissue Culture and Application”
Dr. Panitch Boonsongcheep

10:30 – 12:00 Laboratory session on “Plant Tissue Culture”
*Dr. Panitch Boonsongcheep, Assoc. Prof. Dr. Kanokporn Triwitayakorn,
Dr. Supajit Sraphet, Dr. Nattaya Srisawad, Dr. Piengtawan Tappiban,
Ms. Nuanwan Pongtanom, Ms. Somsri Sakdee, and Ms. Nawarat Suksee*

12:00 – 13:00 Lunch

13:00 – 16:00 Laboratory session on “Plant Tissue Culture”
Dr. Panitch Boonsongcheep, and team

Day 6 (Monday, July 6, 2026)

09:00 – 10:00 Lecture on “Immunoassay”
Asst. Prof. Dr. Alita Kongchanagul

10:00 – 12:00 Laboratory session on Antibody diagnosis
*Asst. Prof. Dr. Alita Kongchanagul, Ms. Kunjimas Ketsuwan, Mr. Iyacoob khunsri,
Dr. Ekkarat Rodpai, Ms. Phissinee Jakaew and Ms. Surat Punyahathaikul*

12:00 – 13:00 Lunch

13:00 – 14:00 Lecture on “Real-world applications of molecular biosciences”
Assoc. Prof. Dr. Poochit Nonejuie

14:00 – 15:00 Lecture on “Structural Exploration of Coronavirus Drug Targets”
Asst. Prof. Dr. Duangrudee Tanramluk

15:00 – 16:00 Laboratory session on “Structural Exploration of Coronavirus Drug Targets”
*Asst. Prof. Dr. Duangrudee Tanramluk, Theptharin Charuraksa and
Miss Siraprapha Duangchai-ngoen*

Day 7 (Tuesday, July 7, 2026)

- 09:00 – 10:00 Lecture on “Animal Cell culture”
Dr. Chutima Thepparit
- 10:00 – 12:00 Laboratory session on “Animal Cell culture”
*Dr. Chutima Thepparit, Ms. Sasiporn Ruangdechsuwan, Mr. Theeraporn Churod,
Mr. Iyacoob khunsri and team*
- 12:00 – 13:00 Lunch
- 13:00 – 16:00 Laboratory session on “Animal Cell culture”
Dr. Chutima Thepparit and team

Day 8 (Wednesday, July 8, 2026)

- 09:00 – 10:00 Lecture on “Genome editing”
Asst. Prof. Dr. Alisa Tubsuwan
- 10:00 – 12:00 Laboratory session on “Genome editing using CRISPR/Cas9”
Asst. Prof. Dr. Alisa Tubsuwan, Mr. Pirut Thongngam and team
- 12:00 – 13:00 Lunch
- 13:00 – 16:00 Laboratory session on “Genome editing using CRISPR/Cas9”
Asst. Prof. Dr. Alisa Tubsuwan, Mr. Pirut Thongngam and team

Day 9 (Thursday, July 9, 2026)

- 09:00 – 10:00 Lecture on “Protein Expression and Purification”
Assoc. Prof. Dr. Chartchai Krittanaï
- 10:00 – 12:00 Laboratory session on “Protein World: protein isolation and visualization”
(Bacterial culture, protein expression, protein preparation)
*Dr. Phattara-orn Havanapan, Assoc. Prof. Dr. Chartchai Krittanaï, Dr. Duangnapa Kovanich,
Dr. Phattarunda Jaree, Asst. Prof. Dr. Ittipat Meewan, Mr. Pannaphan Makarathut,
Ms. Nuanwan Pongtanom Ms. Monruedee Srisaisup and Ms. Somsri Sakdee*
- 12:00 – 13:00 Lunch
- 13:00 – 16:00 Laboratory session on “Protein World: protein isolation and visualization” (cont.)
Dr. Phattara-orn Havanapan and team

Day 10 (Friday, July 10, 2026)

- 09:00 – 10:00 Lecture on “Behavioral studies in animal research”
Asst. Prof. Dr. Sukonthar Ngampramuan
- 10:00 – 12:00 Laboratory session on “The demonstration of animal studies”
*Asst. Prof. Dr. Sukonthar Ngampramuan, Ms. Dungdol Narasilirk,
Ms. Jinnipa Matchwong Mr. Sayan Sukkasem and team*

- 12:00 – 13:00 Lunch
- 13:00 – 14:00 Lecture on Brain and memory
Asst. Prof. Dr. Jiraporn Panmane
- 14:00 – 16:00 Laboratory session on “Brain anatomy and function”
*Assoc. Prof. Dr. Sujira Mukda, Asst. Prof. Dr. Jiraporn Panmane,
Assoc. Prof. Dr. Vorasith Siripornpanich, Ms. Kanda Putthaphongphuek and team*
- 16:00 – 16:30 Closing ceremony