

Student Science Training Program 2026 Batch 3

13–24 July 2026

Day 1 (Monday, July 13, 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 Somjai, Dr. Nattaya Srisawad, Dr. Supajit Sraphet, Dr. Chonticha Saisawang, Ms. Naraporn Sirinonthanaweche 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 14, 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 15, 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. Yamyong Kongmahaphuk

Day 4 (Thursday, July 16, 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 17, 2026)

09:00 – 10:30 Lecture on “Plant Tissue Culture and Application”

Dr. Panitch Boonsnongcheep

10:30 – 12:00 Laboratory session on “Plant Tissue Culture”

Dr. Panitch Boonsnongcheep, 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 Boonsnongcheep, and team

Day 6 (Monday, July 20, 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 21, 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. Sanjira Juntarapornchai, Mr. Theeraporn Churod
Ms. Phissinee Jakaew 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 22, 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 23, 2026)

- 09:00 – 10:00 Lecture on “Protein Expression and Purification”
Assoc. Prof. Dr. Chartchai Krittanai
- 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 Krittanai, Dr. Duangnapa Kovanich,
Dr. Phattarunda Jaree, Dr. Ittipat Meewan, Mr. Pannaphan Makarathut, Ms. Nuanwan Pongtanom
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 24, 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 Narasirilirk,
Ms. Jinnipa Matchwong, Ms. Supanee Teerawat 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