

## Activity Report of Open Application Course vol.24

### Study in Nagasaki! ~From the medicine of Dejima to the latest cutting-edge drugs~

Report from Nagasaki University

This is the second year of invitation support from the SAKURA Exchange Program in Science (Science and Technology Experience Course). In the midst of a cold weather warning for the city of Nagasaki caused by a cold wave, 10 pharmaceutical students and graduate students from Thailand's Chulalongkorn University and 1 supervising teacher took part in the Science and Technology Experience Course run mainly by the School of Pharmaceutical Sciences at Nagasaki Univ. for approximately 1 week from January 22nd to 27th, 2018.

On the first day of their arrival, the participants introduced themselves and were introduced to the history of Nagasaki and Nagasaki Univ. by staff from the School of Pharmaceutical Sciences and the liaison organization, with a break for lunch in between. Snow flurries started during these proceedings, which is rare in Nagasaki, and the Thai students were overjoyed.

Afterward, they visited the Shimomura Novel Laureate Memorial Center for Drug Discovery, where they viewed Dr. Shimomura's research achievements linked to his Nobel Prize in Science as well as various exhibited materials connecting him to the university. The students had a lot of questions for the staff member explaining the museum. They also toured other facilities on the Nagasaki Univ. campus such as the medicinal plant botanical gardens and the university library.



Study tour of the Shimomura Novel Laureate Memorial Center for Drug Discovery

In the evenings during the invitation period, gatherings were held with the instructors in charge of lectures at each research laboratory, the TAs that support them, and study abroad students. Although the food was simply provided by the co-op cafeteria, the participants talked excitedly about unique Nagasaki foods and Japanese cuisine, and these topics kept the energy going during the gatherings.



Gatherings

Over a period of 2 days starting from the following day, the participants visited and toured the organic, biological, and physical analysis research laboratories of the School of Pharmaceutical Sciences. Lectures covered topics such as the development history of fundamental pharmaceuticals, chronological progression of Alzheimer's disease treatment, possibilities for arteriosclerosis medication using bioactive lipids, and the development of analysis reagents using fluorescence phenomena and their applications to environmental analysis. These topics were introduced and analyzed, and lectures also featured simple practical training elements. The

students proactively and diligently participated.



Lecture scene



Practical training in a research laboratory



Commemorative photo outside the entrance to Nagasaki Univ.'s School of Pharmaceutical Sciences

In the second half of the program, the students traveled to the cities of Tosu and Kurume. First, they visited the Otsuka Pharmaceutical Saga Factory, then they toured the Saga Nutraceuticals Research Institute, which is located inside the same grounds, where they received an explanation of the company's products based on the themes of "nutrition" and "exercise."

In the afternoon on the same day, they visited the Kyushu Block Red Cross Blood Center of the Japanese Red Cross Society, which is located in the city of Kurume, toured the area where blood products are manufactured, and listened intently to the explanations of blood testing.



After the visit to the Red Cross Blood Center

On the final day, the students toured the Nakatomi Memorial Medicine Museum in Tosu. There is an excellent herbal medicine museum within the grounds of Chulalongkorn Univ. as well, and the students seemed to take a great deal of interest in the herbal medicine samples, stories of the history of Japanese medicine, and the documents on display.





Scene from the Nakatomi Memorial Medicine Museum tour

At a meeting room in a hotel in Tosu in the afternoon on that day, 2 instructors from Nagasaki Univ. joined the students for a research report on the contents of the program. During this event, each of the students used slideshows with videos that they worked hard to create up until the day before to give passionate presentations about aspects of the program they found memorable and their impressions of it, and also shared their hopes for the future, including other study abroad programs. Afterward, each of the students was given a certificate of completion and a commemorative pin, concluding the program in a meaningful way.



Scene from the research report session