

Undergraduate Medical Science Course in Tsukuba 2017

Faculty of Medicine, University of Tsukuba

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From February 27th to March 7th 2017 the School of Medical Sciences hosted the 3rd Undergraduate Science Course in Tsukuba. This year we invited a total of eleven students from some of our partner universities in Indonesia, Vietnam, and Taiwan.

Participating Students:

University of Indonesia, Indonesia (4 students)

Pajajaran University, Indonesia (1 student)

University of Science HCMC, Vietnam (2 students)

University of Medicine and Pharmacy HCMC, Vietnam (2 students),

National Taiwan University, Department of Clinical Laboratory Sciences and Medical Biotechnology, Taiwan (2 students)

University of Tsukuba, School of Medical Science (11 students)

This program was supported by the Japan-Asia Youth Exchange Program in Science (Sakura Science Plan), Japan Society and Technology (JST).

URL: <http://ssp.jst.go.jp/EN/index.html>



Schedule

| | | | |
|-------------------|---------|---|---|
| 27th Feb (Mon) | AM | arrival (Indonesia, Vietnam : noon, Taiwan:5:00) | Common Use Facility Bld, lecture room 1 共同利用棟B講義室1 |
| | PM5:30 | Opening, PC virus check meeting with faculty members, check-in | Common Use Facility Bld, lecture room 1 共同利用棟B講義室1 |
| 28th Feb (Tue) | AM9:30 | laboratory | lab |
| | PM | laboratory | lab |
| | PM5:00 | event planned by UT students | 4B lobby |
| 1st Mar (Wed) | AM9:30 | talk1 : University of Tsukuba talk2 : Vietnam US UMP talk3 : Universtat Indonesia, Medicine, Pharmacy talk4 : National Taiwan University | 4B116 |
| | PM12:30 | laboratory | lab |
| 2nd Mar (Thu) | AM9:30 | laboratory | lab |
| | PM | laboratory | lab |
| 3rd Mar (Fri) | AM9:30 | laboratory | lab |
| | PM12:30 | Tsukuba city research institutes tour (13:30JAXA, 15:00NIMS) | Entrance of Hospital (Keyaki building) |
| 4th Mar (Sat) | AM7:30 | Tokyo culture tour | Matsumi-guchi Information 7:30 |
| | PM | Tokyo culture tour | |
| 5th Mar (Sun) | AM | preparation for presentation | 4B lobby or lab |
| | PM | preparation for presentation/ free time | 4B lobby or lab |
| 6th Mar (Mon) | AM9:30 | practice for presentation (instruction by MECC faculty) Introduction of UT programs | Common Use Facility Bld, lecture room 1 |
| | PM15:00 | presentation farewell party | Common Use Facility Bld, lecture room 1 4B104 |
| 7th Mar (Tue) | AM | Checkout Departure in morniing | |
| | PM | free time at Narita airport | |

Orientation and introduction to the course, meeting new friends, and enjoying.



Talk by students: learning about culture, research, and education at our partner universities.



Laboratory

The 11 visiting students paired with 11 undergraduate medical science students from the University of Tsukuba. Each pair was placed in a laboratory to carry out experiments and experience research in a variety of fields of medical science.

| Host laboratory | Supervisor | Invited student | UT student |
|---------------------------------|---|------------------------------|-------------------|
| Hematology | Shigeru Chiba | Yu-Hsuan Fu | Hazuki Oishi |
| Biochemistry, Gene Regulation | Koji Hisatake | Angela Kimberly Tjahjadi | Takahiro Yamanaka |
| Metabolism and Endocrinology | Hitoshi Shimano Yoshimi Nakagawa | Bashar Adi Wahyu Pandhita | Moe Goto |
| Immunology | Akira Shibuya | Nguyen Xuan Quy | Fujino Mitsunori |
| Experimental Pathology | Mitsuyasu Kato | Keng Ieng Wong | Yanazawa Kouki |
| Laboratory Animal Science | Fumihiko Sugiyama | Dinh Hoang Minh | Goto Nohara |
| Medical Genetics | Emiko Noguchi | Femmi Anwar | Kohei Kobayashi |
| Physiological Chemistry | Norihiko Ohbayashi Yuji Funakoshi Yasunori Kanaho | Natasha Laurentia Elifele K. | Minako Okazaki |
| Molecular Cell Biology | Kenji Irie Yasuyuki Suda | Huynh Phuc Khanh Minh | Anju Doi |
| Infection Biology, Bacteriology | Kazuya Morikawa | Duong Minh Hang | Harue Suzuki |
| Molecular Pharmacology | Masashi Yanagisawa | Raihandhana Putradista | Shinya Nakata |

Carrying out research and experiments in various laboratories, leaning the science and experimental techniques, and making friends along the way.



The program included a visit to JAXA to see the various activities and achievements of the Japanese Space Exploration Agency, and also a visit to National Institute of Materials Science (NIMS), where we found out about how research into materials science and particularly nanotechnology is helping to shape the medical treatments of the future. The course also gave us the opportunity to introduce Japanese life and culture to our visitors from overseas through visits to Tokyo.





In the morning of the penultimate day, the participants had a lecture on how to give effective scientific presentations and in the afternoon they gave group presentations to introduce their research activities and experimental results.





Presentation



Farewell



Letters from participants

Testimonial for Sakura Program 2017

By Angela Kimberly Tjahjadi, University of Indonesia

When I was in Tsukuba University, time flew very fast. Participating the one-week research exchange Sakura Program has become my most valuable experience among other programs I have undergone. We are conducting variety of interesting and novel experiments, ones we never had before in Indonesia. We learnt a lot of exciting experiments from our beloved host lab professors and assistant professors; starting from experimental procedures of pipetting, making observation using electron or fluorescent microscope, dissecting genetically modified mouse and testing drug's efficacy in laboratory rats. I personally believe that they have changed my perspective of research. I am truly enlightened by their resilience and assiduous personality; most scientists have great keen on searching newest topic on mechanism highly currently developed. Almost every month, they will have different research and results in new knowledge and pristine breakthrough.

In spite spending most of my time in laboratory, I also learn cultural lesson during my stay in Tsukuba City. Acknowledging Japanese's golden principle of punctuality, professionalism and pro-active, I am triggered to start build such characteristics on myself. Holding on those paradigms, I will certainly have higher productivity. Furthermore, respect and amicableness are two moral lessons that I deeply cherish during my stay in Japan. They believe that treating others is equivalent with treating themselves. That is the main reason why we need to imitate such polite behavior toward others, especially the elders and seniors.



While joining this program, all participants can share their knowledge and build good rapport among themselves. For example, I now have foreign best colleague from Japan, Taiwan and Vietnam. They are willing to help me in any situations. Basically, from Sakura Project, I can broaden my networking thus in the future, I can easily depend on my networking to create a collaboration among us to establish a difference in the medical world.

Not only sharing our cultural heritage, all participants can elaborate and share their visions in medical field research. Most of the time, we listen to each other interest in various research field such as gene regulation, virology, metabolic diseases and sport medicine. Our quality time discussing about our future plans has become my precious source of inspirations to motivate myself in pursuing higher education abroad. I am hoping that I am given the opportunity to continue conducting innovative research for my master degree in Tsukuba University.

Duong Minh Hang (Yumi)

Faculty of Medicine

University of Medicine and Pharmacy, Ho Chi Minh city, Vietnam

Participant of the Undergraduate Medical Science Course 3/2017

SAKURA SCIENCE PROGRAM REPORT

TSUKUBA – 27/02 to 07/3/2017

When I first knew I was chosen to join the Sakura Science program, March 2017 in Tsukuba, I felt both excited and worried because this was the first time I am away from home alone and I still had classes at school that time. My father, as an engineer who has been to Japan several times and also visited Tsukuba once, encouraged me to take this precious opportunity because “Tsukuba science city is the ideal place for anyone who works in fields of science research”. So I decided to take this 9-day journey to Tsukuba, which is one of the most memorable and wonderful experiences in my life.

The winter weather in Japan was very cold for a girl from Vietnam like me, but I still felt warm inside by the friendly welcome from Dr. Kiong Ho and Japanese students on my first day arriving at University of Tsukuba. I was happy to meet Moe Goto again, we became good friends since the Undergraduate Medical science program in Ho Chi Minh city – my hometown, in Summer 2016. She introduced us to other Japanese friends and kindly guided us to our guesthouse. My partner in this course is Harue Suzuki, who is a very nice, smart and kind girl. Although she is the only freshman in this course but she still kept up with other friends and worked effectively. It was my luck to have a hard-working and kind partner like her, who helped me in the new working environment, making the presentation and also communication to Japanese when we went sightseeing.

In this course I participated in Professor Morikawa’s Microbiology laboratory. Me and my partner did a small research about *Staphylococcus aureus* characteristic. Professor Morikawa and all the lab members: Veronica, Vishal, Lena, Jake taught us about some Microbiology principles, techniques and always answer to our questions without any hesitation. Not only new knowledge, but I also learnt about how researchers in a developed science city work and the organization of a professional Microbiology lab. With their support, me and my partner completed our presentation with some interesting results. Moreover, I also listened to the lab members’ working experiences, life stories from another cultures when having lunch, dinner with them. I am so grateful to have chance working in an international and modern environment with people come from different countries around the world, but share the same passion in science.



During our stay in Japan, we visited some amazing places and tourist attractions. I was extremely impressed by the huge area of University of Tsukuba campus and breath-taking natural views with flowers, trees and lakes in the campus. We visited JAXA and NIMS, at there, I observed and admired the

improvement of Japan's science. We also went to Tokyo one day and I could feel the unique atmosphere of one of the world's greatest and busiest cities. I love watching Tokyo citizens in their daily life, tasting exquisite Japanese food and exploring Japanese history when visiting the Imperial palace and Asakusa Kannon temple.

I would like to send my sincere appreciation to Professor Kazuya Morikawa and Dr. Kiong Ho, who were busy but still spent their precious time to organize this course for us. I want to send my warmest thanks to all the lab members, friends and staffs of University of Tsukuba for giving me one of the most beautiful memories in my life and opening new doors for my future research career.

Last but not least, it is interesting that when we visited Japan, the emperor Akihito and the empress also visited Vietnam. He was a biologist and did his PhD research in Vietnam about 50 years ago. It means that there was already a traditional science bond between Japan and Vietnam, I hope this bond will continue to grow stronger and better because together we can IMAGINE THE FUTURE.

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