Student Reports of the Global Fellows Programme 2024 in London



Yuto TAKEI
Department of Mathematical and Computing Science
School of Computing, D3

In this program, I worked with a group of PhD students from Tokyo Tech and Imperial College London to discuss potential solutions to global issues and create a 5-minute presentation.

The group work, which took up most of our time in the program, allowed me to gain a lot of interdisciplinary skills and knowledge. I recognized the importance of acknowledging the diverse backgrounds of team members and engaging in active discussions. I also deepened my understanding of the field of health and welfare, which was unfamiliar to me, and discovered new potential applications and contributions in my own field of expertise. Through intense communication with the students from Imperial, I was able to build friendly relationships and overcome the psychological distance of being in a foreign and different culture, feeling a strong sense of excitement and resonance.

At the same time, there are several areas for improvement that I have found about myself from the program. For example, I could have facilitated discussions more efficiently within the limited program time and could have focused more on communicating with consideration for others. This was a significant takeaway that will contribute to my doctoral research and future growth. In fact, using non-native English to discuss the completely unfamiliar field required constant concentration, leaving me exhausted at the end of each day. However, on the final day of the program, we were able to deliver a satisfying presentation and complete a poster as a team. This gave me a great sense of accomplishment and also provided an opportunity to realize the areas for improvement mentioned above, leading to great personal growth.

Additionally, my stay outside of the program was also valuable. Adjacent to Imperial's campus were three historic museums. I enjoyed visiting each of them, although not enough in time, during my stay. Furthermore, the campus was only a few subway stations away from the center of London, allowing me to enjoy typical evening entertainment after the program, such as having Fish and Chips with beer at pubs thanks to the courtesy of the Imperial students.

Overall, I believe this program was a very fulfilling and positive experience for me. If there are similar opportunities in the future, I would definitely sign up again, and I strongly recommend this program to anyone with global interests.



Wishnu Agung BAROTO

Department of Social and Human Science School of Environment and Society, D3

Upon arriving in London, especially where Imperial College is located in South Kensington, I found that the area has a mix of historic and modern architecture, which heightened my interest. The orientation

session introduced us to the program structure and our team's project. I was excited to meet fellow participants from Imperial, which consists of students from various countries.

The theme for our project was Good Health and Well-Being. Working in a diverse team with different backgrounds, cultures, and expertise was both challenging and rewarding. We spent hours discussing our project with guidance from coaches and working through challenges.

Key learnings:

- •Cross-cultural collaboration: I learned to work with people with different working styles and communication methods, enhancing my global perspective.
- •Interdisciplinary approach: Combining engineering, biomedical sciences, and disease studies broadened my understanding of complex problems and their potential solutions.

During the programme, I also had an opportunity to network with other fellows and explore London, which I believe will foster connections in the future.

Another experience was the moment of presenting our findings to the referees, which was nerve-wracking but exciting. The questions and feedback we received were constructive and encouraging. In our final reflection session, we realized how much we had grown in just a week.

Overall Feelings and Impact:

The programme left me feeling inspired and more confident in my ability to contribute to global challenges. The exposure to expert mentorship and a network of motivated fellows from different backgrounds was truly transformative. I left with a stronger sense of purpose and a broader perspective on my field of study.

This experience reinforced the importance of international collaboration in addressing global issues and motivated me to seek out more opportunities for cross-cultural academic or professional exchanges in the future.



Luong Duc NHAT

Department of System and Control Engineering School of Engineering, D3

This program lasted only one week but had a significant impact on me. The first thing I experienced was the diversity of participants. We had diversity not only in terms of nationality but also in major, age, experience, and future plans. This, of course, brought some difficulties in teamwork, but it encouraged me to learn more—not

just academically but also about people's backgrounds—and to show empathy. Being in a diverse environment meant stepping out of the comfort zone for an international student who has been studying in Japan for four years.

Another comfort zone I stepped out of, thanks to this program, was during the group work. It was impossible to align everyone's expertise perfectly to complete the group tasks, so I sometimes had to sacrifice my own contributions and work harder to support others in order to achieve efficient results.

Another interesting thing I noticed is that I was only able to be in London for one week, so I wanted to spend as much time as possible exploring the city. This motivated me to complete my work within a set timeframe and not bring it home. Bringing work home or working extra hours is a habit I developed during my PhD studies. This program gently reminded me of the importance of work-life balance. I had wonderful experiences on the streets of London, visiting pubs and restaurants, and spent many hours talking with amazing people.



Sota TAKAGI

Department of Transdisciplinary Science and Engineering, School of Environment and Society, D2

I had a very stimulating and rewarding week participating in the Imperial-Tokyo Tech Global Fellow Program (GFP) at Imperial College London. The program focused on the theme of SDGs "#3: Good Health and Well-being," and we engaged in discussions about identifying problems and proposing solutions.

Our team focused on waterborne diseases, and we leveraged the chemistry knowledge of our members to propose solutions, which we presented at the final session. Through these activities, I not only gained a deeper understanding of how knowledge and skills are applied in the field of sustainable development, but also realized the importance of working with people from diverse backgrounds. As a result, our team was fortunate enough to receive an

award.

In addition to our team work, I had the opportunity to participate in tours of the White City campus and central London, as well as attend talks by Imperial College London professors and alumni entrepreneurs. These experiences provided me with insights not only into the history and culture of London, but also into different academic fields. This exposure broadened my knowledge beyond my specialization and encouraged me to think more deeply about the various career paths available to me after completing my PhD course.

Finally, I would like to express my sincere gratitude to the professors and staff who supported this program, as well as the students from Imperial and Tokyo Tech with whom I was able to connect through this opportunity. I'm determined to apply the lessons I've learned and work towards becoming a researcher who can contribute on a global scale.



Kotaro YOSHIDA

Department of Chemical Science and Engineering School of Materials and Chemical Technology, D2

I had so much fun and inspiration through this programme. We have discussed one of the themes of SDGs, "Health and Wellbeing," and presented our research project concerning the theme using a handmade

poster. Since our presentation topics were not something I was familiar with but rather something closer to other member's research themes, I had a bit of trouble following the discussion and providing my opinion on the topics. However, as the discussions constantly brought new knowledge, I felt a sense of satisfaction from broadening my perspective, and despite the short duration of my stay, I was able to feel personal growth.

Also, the programme provided us with some time for a tour of central London. We experienced some notable historical buildings, places, and so on, which made me feel kind of refreshed after the intense discussion. We were also brought to some restaurants and bars after finishing the schedule of the day by some students at Imperial.



Yao TAIDONG

Department of Materials Science and Engineering School of Materials and Chemicals Technology, D2

During this week, I teamed up with another student from Tokyo Institute of Technology and three other students from Imperial College. From the beginning, we quickly got to know each other through mutual introductions and some team challenges. In this process, I found that we

came from very diverse academic and cultural backgrounds. But at the same time, we are all researchers, with the same rigorous and pragmatic attitude towards scientific research. Because I am a relatively open-minded person, cross-cultural communication is not difficult for me. We have always maintained a state of sharing, flexibility, and mutual support. The theme we chose to tackle is intervention measures for STD/STI in the world. This is a theme that has a great cultural impact on Asians, but it is also very problematic even with such advanced medical care, the number of infections is still increasing every day. The judges also pointed out that the biggest problem with this theme may not be science and technology, but cultural barriers. However, our team members come from the UK, Singapore, Italy, and East Asia, which well reflects the advantages of cooperation among diverse groups in solving some global problems.

In general, this project is very rewarding. On the one hand, I have a certain understanding of the scenery and history of London, especially their contributions to the medical cause in the course of history. On the other hand, the most important thing is that I enjoy this kind of cross-cultural communication and the process of discussing and exchanging ideas with experts in various fields to complete a project together. I hope I can have more opportunities to work on similar cross-border projects in the future.



Miyuki SUZUKI

Department of Social and Human Sciences School of Environment and Society, D2

The Imperial-Tokyo Tech Global Fellow Programme (GFP) took place from 9-13 September.

The GFP is a mixed group of Tokyo Tech and Imperial doctoral students who work together to solve global problems. The focus of

this year's programme was SDGS.3. 'Health and Wellbeing'.

Around 30 participants engaged in 6 days of intensive activities, including group discussions, poster presentations and thought-provoking field trips.

The programme developed essential skills such as leadership, interdisciplinary and intercultural awareness and effective communication, while also fostering valuable networks

necessary for successful collaboration.

Teams' achievements were evaluated in a poster presentation (PITCH) on the final day. Our team proposed an idea on SDGS.3.3 (communicable disease) called 'Eliminating Waterborne Diseases with Light'. Worldwide, more than 250 million people are infected with waterborne diseases each year, of which more than 10 million dies. Our team has devised a new method of photocatalysis to tackle this problem, which is cheap and easy to do anywhere. And my team won the Best Collaborative Spirit Award from the board. I think this has brought our team together even more.

Personally, the lectures on the first day by the invited lecturers were very important. The experiences of some of the lecturers were directly helpful for my doctoral research.

I was not confident in my English skills, especially speaking, but international students from Tokyo Tech and Imperial students helped me a lot. I would also recommend that students who, like me, lack confidence in their speaking skills should take speaking lessons with Professor Koizumi during the summer holidays.

The experience of this programme was meaningful and fulfilling for me thanks to the help of many people. I would like to thank everyone involved from the bottom of my heart.



Ni Kadek Diah ANGGARENI

Department of Life Science and Technology School of Life Science and Technology, D2

If someone asks me how GFP was, I will proudly say "I made great friends and met great people!"

Fueled by English breakfast, scrambled egg, sausage, and bacon, I nervously went to Imperial South Kensington Campus with the other Tokyo Tech students. Thanks to the warm welcome, all the tense nerve soon faded away with how everyone was just so friendly and kind that laughter and chattering floated in the air even on our first day!

We then got to know about each other's research field and further deepen our teamwork through team challenges. The fast-paced flow of the programme with act-discuss-feedback gave a fresh breath to the slow routine I usually had. The programme also exposed us to knowledge about global awareness in SDGs No. 3 through presentations by great speakers like Dr. Ilaria Dorigatti and Jumpei Kashiwamura, showing new insights and sides of collaborative innovation in solving world problems. Further, we also got inspired by the collections exhibited in National History Museum before we then guided through a walk in Central London, learning the name of the faces in historical landmarks of British history.

We started working towards the main event of the programme on the 4th day. Putting our expertise together as a team coming from different disciplinary and cultures, we came up with our solution to help solve global road traffic issue which we named "ASD: Accident's Severity Detector". With this idea, we went to pitch, received feedback, and polish our proposal before the grand presentation on the last day. With every group's poster hang, hand-written and colorful, the room's atmosphere was full of excitement and optimism brought by the works of collaborative innovation gathered.

While I grew as PhD candidate in my knowledge about the big world, what I treasure the most from this programme is the time I spent with everyone. Their hospitality continued even after the day ends by taking us to many touristic places, introducing us to the lively student's life in Imperial through Union Pub, and always joining us for dinner together. Their kindness, coupled with amazing experience I had during the programme now become my new-found motivation to move forward. Thank you!



Gong ZILAI
Department of Systems and Control Engineering
Department of Engineering, D2

I was fortunate to have the opportunity to join the GFP program in 2024. The topic for this program is "Good health and wellbeing". The program started from Monday and ended at Friday.

During the GFP program, participants were first divided into groups and I was in Group 5 with Ale, Bap, Dulanin, Diah and Koji with coach Par. My team were named as ImparTech after discussion in Monday. From Monday to Friday, we went through icebreaking including self-introduction, group challenges and city tours. We then focused on the topic of this program by creating posters and preparing for the final presentation at Thursday and Friday.

The most impressive point of this program is that all of the team members in my group are from different countries. Furthermore, no one has the English as the first language. It is a super fascinate feeling when facing countries with different nationalities and backgrounds. Even though there were difficulties when trying to express the opinion to others, the discussion was proceeded smoothly because we were trying to communicate with each other. From this program I have learnt that there is actually no difficulty on communicating with people no matter what the nationality is.

K.O.Department of Architecture and Building Engineering School of Environment and Society, D2

By collaborating with students from diverse backgrounds and area s of expertise from around the world, I was able to gain a global perspective and broaden my own horizons. By addressing issues related to SDG Goal 3: Good Health and Well Being, I felt that I was ab le to explore comprehensive solutions that extend beyond my area of expertise. In addition, I had the invaluable opportunity to build a network with PhD students from both Imperial College London and Tokyo Tech, people I wouldn't normally have the chance to interact with.

During the tour of central London's major landmarks, I was introduced to places such as Big Ben , Trafalgar Square and the National Gallery, which deepened my understanding of the local culture and history. In particular, walking through the city and experiencing the urban landscape provided me with significant insights from an urban planning perspective . Through this experience, I was able to learn a great deal about the structure and layout of London. In addition, my inter actions with students from Imperial College gave me the opportunity to learn about the London's historical background as well as its modern lifestyle. This exchange of knowledge and perspectives enriched my experience and made it an extremely valuable part of the program. The knowledge I gained, both academically and culturally, will certainly contribute to my future endeavors.



Ares ARRAD
Department of Life Science and Technology
School of Life Science and Technology, D1

Before this program, I have never been outside of Asia. Not only that, but I have also never collaborated with people of other fields before. Therefore, joining this program was a huge step for me, both geographically and academically speaking. Here I will describe the

highlights of my experience during the program.

Day 1 We had an introductory session with all the group members and get to know each other's research, background, and interests. It was interesting to find commonalities between us even though we come from various field and background. Next, we listened to talks by experts from Imperial College, but one talk that really inspired me was Dr. Celine Mougenot's, about Design Engineering. We also had a small cultural exchange session within the group members right before the welcoming dinner party. It was a memorable introductory session, and the Imperial students invited us for dinner in a wonderful local pizza restaurant.

Day 2 We had a wonderful team building session through a series of games. The games were very fun and engaging, and it really emboldened our team spirit. However, we did find

difficulties when trying to agree on an idea or solution. Therefore, we decided to assign a group leader and just learn to stick to the decision of the leader after a thorough discussion. After that, my team went to Victoria and Albert Museum, where we tried to find a source of inspiration related to the theme of our project. We decided to choose an exhibition about a group of oppressed minority group in Afghanistan, the Hazara people, because this made us realize that there are many underprivileged people who do not have the luxury to even have a simple, safe and healthy life. My group was inspired to come up with a project idea that can be accessible to everyone, especially those who really need it.

Day 3 We had a tour of White City campus, where apparently all of my Imperial group members' lab were located. There, I attended two wonderful entrepreneurship and MedTech seminar. I have learned the pathway that I can take to take my idea forward, and create my own start-up based on it. There appears to be many pitfalls in the process that should be avoided, but now I understand why making a start-up is a physically and mentally taxing task. I realized the importance of collaboration, especially interdisciplinary collaboration, in order to increase the chance for the idea to make it past R&D and commercialization phase. With that in mind, we brainstormed for ideas that is both useful and realistic, by combining our skills and ideas to solve the problem related to the theme: Good Health and Wellbeing. After an intense brainstorming session, we cooled ourselves down by joining the arranged walking tour around the heart of London. The tour guide showed us a lot of historical sites in London, especially those related to the theme of the program like St. Thomas' Hospital, and also the culture of Londoners. It was a very interesting and insightful tour.

Day 4 This is the day where we brainstormed the bulk of our idea for our project. Initially, we listed the pros and cons of the initial ideas that we came up with in the previous session. But, based on the basis of design thinking taught by Dr. Celine Mougenout, we decided to go with Waterborne diseases. This is because, two of our group members including myself had been a victim of Waterborne disease, specifically typhoid. We also wanted to address that many countries still does not have access to clean water, and many more does not have the means to eliminate the unseen pathogens within the water. Combining our expertise knowledge, especially in biology, chemistry, and medical anthropology, we came up with the idea: ROSwater (I came up with the name). Our idea is basically to use zinc oxide particles with photocatalytic properties to kill bacteria using the power of light. We were quite happy with the idea, but each of use were tasked to do more research in order to respond to the feedback that we receive from the elevator pitch session. I spent almost the whole night trying to figure out ways to improve our idea by screening through relevant academic papers.

Day 5 It was the final day of the program, but it was a very intense one. Our final presentation was a few hours away, and we had to finalize our idea and poster for the presentation. All 6 of us worked really hard to write and draw figures on the poster. With just 15 minutes left, we practiced for the presentation. At first, we did not know if we could make it on time, or if our

idea is feasible. But fortunately, our teammates are mostly optimistic and we support each other. I think it is important to keep the team morales up and care for each other. During the final presentation, we managed to deliver our parts well and received great constructive feedback from the judges. After an intense judging session of all teams, which I witnessed thoroughly, the result was finally announced. In the end, our team won the Collaborative Award! We were very happy, and we celebrated our achievement, thanking everyone for all the hard work that we put into this project. After the program, we bid our farewell to the staffs, and the Imperial students invited us for a night stroll along the River Thames. We really enjoyed the city night view. And after all that, we finally had to bid farewell. But my group had plans to continue this project, so we promised to keep in contact even after the project. I really hope that we can realize the idea we had come up with during the program.



Yuji TAGATA
Department of Systems and Control Engineering
School of Engineering, D1

In the summer of 2024, several Ph.D. candidates from Tokyo Tech and Imperial College London participated in "Imperial – Tokyo Tech Global Fellows Programme 2024 (GFP)". This year's theme was "Good Health and Wellbeing". The focus was to select a target from

Goal 3: Good Health and Wellbeing of the SDGs and to seek solutions over a period of 5 days. Ph.D. candidates are required to have a high level of expertise and research skills. However, Tokyo Tech students and Imperial students are all equal under this theme, and we started with group work in a hands-on manner. We searched for a target to challenge from each member's different culture and experience and had intense discussions. The Imperial students consisted mainly of excellent students from EU countries with different customs and ways of thinking, which was a valuable group work that we could not experience at Tokyo Tech. The discussions with the Imperial students were very active. At first, I felt like I was going to be swallowed up by the atmosphere. Japanese people listen to others' opinions to the end and then develop discussions in a cooperative manner. However, European do not engage in condescension, but instead express their better opinions and push the discussion forward. Both sides have good points. However, the fundamental ways of thinking are diametrically opposed. I have learned the good points of both cultures through this program. I was not able to participate in discussions well in the beginning of it because of my few overseas experiences, but by understanding and adapting to the cultural differences, I gradually became able to participate in discussions. By its end, I became accustomed to the atmosphere and was able to have my opinions considered.

In recent years, we have often heard the word "globalization". However, it is not going well in Japan, which is an island nation. I believe that the learning I experienced this time was only

possible because of GFP. There may be many students like me who have few overseas experiences and hesitate to participate in overseas activity, but I would like them to join GFP without thinking in detail. The main part of GFP was group work, but there was also plenty of time to enjoy cultural exchange and sightseeing. It is an invaluable treasure for me to have made friends in the same situation who are making efforts in faraway country.

In October 2024, Tokyo Tech will be newly reborn as Institute of Science Tokyo. There will be new attempts to improve international competitiveness. As an Institute of Science Tokyo student who is enrolled in this transitional period, I believe that participating in GFP will be a good experience for our new university and for our own life.



<u>Taiki ABE</u>
Department of Life Science and Technology
School of Life Science and Technology, D1

This programme was a valuable experience that allowed me to improve my own English language skills. It is difficult to be in Japan and have English be the language you see and hear for 24 hours a day. However, because everything in London is in English, the way of

thinking naturally became English. I have had many opportunities to read English, but never to speak it, and this was the biggest challenge. What I felt was important in speaking English was to just say it out loud. If you are too worried about grammar and word errors and can't speak what you are thinking, the other person won't understand. Even if I was wrong, by saying it out loud, the other person understood and corrected me.

The group work was also a valuable experience to interact with doctoral students with different specializations from my own. I was the only Japanese student in my group, and although I was the only one who spoke English slowly, my group members listened carefully and listened to my opinions. There are two things that I felt were important in collaborating with people from different specializations through this programme: firstly, it is important to have a good starting point; secondly, it is important to have a good understanding of each other's work. No matter what the agenda, someone will have a wealth of knowledge and someone will lack knowledge. The first step is to share the breadth and depth of everyone's knowledge to identify idiosyncrasies. After that, it is important to share roles; secondly, do not be shy. It does not make sense to keep your opinions to yourself. It is only by sharing them with others that they become opinions and can be discussed.

Finally, interacting with students from abroad was stimulating in a way that I could not feel in Japan. Until now, I had only focused on Japan, but I felt that in the future I would like to live my life with an international perspective.