WELCOME TO FGL

The ancient Japanese divided the calendar into 72 micro-seasons based on Chinese sources. As you read through this today, this ancient calendar reminds us that now is the season of 「桜始開」 or ‘The First Cherry Blossoms’.

This year, spring knocked our doors early. Winter brought in only a handful of days of snow before it started getting warm again. Much like every year, spring is the time to revive and rejuvenate. Fresh graduates pave through the morning rush hour in subway trains to reach their workplace while students flip through new books as a new academic year begins. However, this is not another spring for us at FGL.

This year, FGL turns a decade old.

A 10-year old FGL is like any other human on the brink of entering adolescence. They want to make new friends and form new social circles. They begin to break apart from the secure shell of childhood to new challenges and fresh opportunities. There couldn’t have been a better time to shape this young program and help it mature by creating this ‘FGL Community’.

At Tohoku, the ‘FGL Community’ is envisioned as a family of extended connections turning into intimate relationships. We have designed it to include the students, the staff, the professors and the alumni. In the years that we spend in Japan under this program, our relationships with each other strengthen in many ways from mentors to mates. This community aims to be the physical manifestation of our shared experiences.

Starting now, the FGL Community shall be represented by one student from each program in each current academic year. These 12 students shall form the core team who shall be facilitators of this community and shall also be its representatives.

The core team shall be responsible for arranging social and interactive events in the community, write this periodical newsletter, connect with the alumni to forge a strong alumni-current student network and also be representative to challenges in the community by bridging the students with the administration. With a basic skeletal structure in place, the core team can innovate and build upon all that they deem to be necessary.

This is the very first issue of the newsletter recording this momentous step in our community. As we live and paddle through uncertain times, understanding the need to stay in contact with each other has become ever more necessary. In this issue, we bring to you stories of graduation, of efforts in innovation and pushing the boundaries of human knowledge through research, and of safety and precaution through an unprecedented public health crisis in the modern times.

The community is there for you and us to share and learn. It shall connect, educate and innovate for everyone who was, is and shall ever be a part of the FGL program.

After all, when at FGL, we are at home.
Ask MingLu SENPAI!

MingLu-Senpai is a fourth year IMAC-U student. She is set for an early graduation given her extraordinary academic results! Let’s find out more about her.

Q Could you first tell us a little about yourself-name, what you're studying, hobbies?

A As you know, I am in the fourth year of the IMAC-U course. I belong to the “Supercomputer Lab”. I believe you know what supercomputers are? (Laugh) Basically, they are computers that do super-fast calculations. My major is to study them and to think about how to make them faster and faster. You also asked me about my hobbies, right? I actually like Japanese animation! But recently I have been into games - the Nintendo Switch. I don’t know what it is called in English, but I like this game, called Fire Emblem in Japanese, the new one!

Q How would you describe your stay here in Sendai for the last 4 years? Could share any insights that you have learnt in your daily life here?

A There are so many things that I am not sure which on to begin with. The atmosphere in Sendai allows us to calm down and focus on our studies. Hmm… insights… this is quite a hard question because there are so many things and I am not sure which one I should tell you about right now. I stayed at the dorm for two years at Sanjo. I really enjoyed those two years and it was my first two years, right? And I knew nothing before I came to Japan. I miss all my old friends.

As they have an international student organization called TUFSA. At that time, about once every three months they had dance parties and all kinds of other parties and I really enjoyed those! I think that that it’s a really good experience for all international students. I would also like to add one more thing. You know that we live in units of 8 students and in my unit, I had 4 international students and 4 Japanese students.

During the dinner time every day, we would all go to the kitchen and eat together. I think that it is a very good chance to talk with them because we can share our daily life. And regarding city life, my city life, how do I say, I didn’t really go that often for shopping for the first two years. This was because I wanted a really high GPA, therefore I went to the library almost every day instead to study.

Q Any advice/tips for your juniors regarding academic life, part-time jobs, scholarships and relationships?

A Wow, that’s a meaningful question. Based on my experience, it depends. There are several aspects in the academic life. For example, if you want a high GPA, it’s not simple but it is relatively easy. I cannot say for AMC or AMB, I apologize, but for IMAC-U, if you want a high GPA, having a good exam school is important but of course, that’s not all. Even if your exam scores it not high enough, if you’re active in class, that is, actively participate in class by asking questions to the professors or send them emails about something interesting, this will give a very good impression. The impression will help you, how can I say, to “show yourself.” And I think the most important thing in academic life or research is to communicate to show your idea and share them to different people. I am not sure but some students, especially the Japanese students are quite shy and are unable to express themselves. But I think that this is not really good for their experience. I hope that, at least the FGL students, all of us can be active.

Part time:

Regarding part-time jobs, I’m only taking ones at the university. Actually, I’m taking the AA, the administrative assistant, for the international department. So, this part-time job is to help international freshmen by answering questions or by helping them with government procedures.
So, that’s my part-time job. Right now, I share ideas and advice to the freshmen about part-time jobs. And I have noticed that many suffer because of their Japanese level. This is because most of the part-time jobs outside of university always ask for a high level of Japanese. That may be tough for the freshmen because they need time to first get used to the environment. I think that if they can get used to the environment and are able to free up some time to get a part-time job, I think, that I would be very good experience for the future. Because from the part-time job, you can study the Japanese culture which might help with several Japanese business things. I recommend them to take the part-time job if they have the time.

**Scholarships:**

Scholarships! I received the MEXT. But the problem is, we cannot extend our MEXT. As in, when I graduate tomorrow, I want to continue my studies to obtain my Masters, right? So I cannot receive MEXT anymore. That is a little troublesome for me. That’s why, I’ve been trying to look for other scholarships. Some scholarships are nice but some of them are like, for example, they ask you to go to Tokyo every month for some special scholarship vent. And I don’t really like that.

**Social relations:**

That’s a very interesting question. First of all, I think relation is important for all human beings. When I was in the 1st and 2nd year, I was in a dance circle, and I made so many friends there and also had many experiences with the Japanese circle/club culture. I really enjoyed that! I really did study a lot – the dance itself, the Japanese language as well as the culture itself. Yes, I think that circle is very good, and I believe everyone should join a circle. But the thing is, for the social relationship, for some international students, they may think that this is kind of tough because, first of all, they have the language problem. If you cannot express yourself, other people cannot understand you and you cannot make any new friends. I actually know someone in my generation who felt quite lonely. For international students, I think that we need to get used to such loneliness and must have the courage to make new friends. Yeah, I think that this really requires courage.

Actually, for me, I’ve been enjoying my life recently, my lab mates and my professor are very nice. We talk a lot and we can share our experience. I think that environment is very important.

**Q** What is the most important point you’d like to remind when entering lab/studying in Tohoku?

**A** To me, the crucial point is that you have to know “what you want to do.” My juniors often ask me how to choose their laboratories in the future and some of them are interested in several fields. For example, one of them was interested in both robotics and aerospace engineering, but you can’t enter every laboratory. Therefore, finding what you want to do is important. If you already find your interest, try your best to focus on it. Once you focus on it, you will have a higher chance to succeed.

**Q** What do you think is the proper attitude to face the challenge?

**A** “Positive” is what you have to be when facing any challenge. In your lives, you will fail or suffer setbacks. However, don’t be upset and give up. If you can face the challenge again, you will become stronger. Be positive about everything, then there won’t be any challenge you cannot overcome.

**Q** What is your plan after graduating from Tohoku? (Master / Doctor / Job)

**A** I plan to continue studying for my master’s degree in Tohoku university. Also, I have the plan to study the doctoral degree at other universities. The life in the laboratory is meaningful to me and I enjoy the time when conducting research. As a result, I’d like to be either a researcher in a research institute or a professor at a university.

**Q** Could you, in a few words, describe where did you come up with the idea for your thesis project? What inspired you?

**A** In a general word, my research is about using supercomputers to make predictions about the errors that may occur in the future. For example, if some machines in the factory suddenly don’t work effectively or just shut down because of some unknown factors it would raise costs in its manufacture. This would improve the long-term efficiency of the system.
Any recommendations for learning Japanese?

I would like to say that it’s about always keeping a positive attitude and finding the best material for yourself to learn Japanese. In my case, because I’m a big fan of Japanese animation I used to watch lots of animations and play games. Furthermore, I would chat and practice with my friends or unit members. My Japanese skills is the result of what I learnt from the animations and games.

How did you learn about the FGL program and why did you choose Tohoku University?

Because the professors of Tohoku University held a university preaching presentation at my high school, and I was impressed and found that this was a good chance to challenge myself.

Did you do anything special or interesting during the vacation?

During the last spring vacation, I went to the lab everyday (since all kinds of events are cancelled because of COVID-19). I talked a lot to my professor about research in the laboratory, related topics about the major and other interesting stories by the professor which gave me a clear view about my research field.

Research Topics of the 4th Year FGLs

Molecular Mechanism of Differential Pigmentation Development in Vertebrates

HyoJae Chung

Have you ever wondered what is the value of studying “marine biology”? Many people consider that only the scientific researches that directly contribute to the development of the society to be valuable, and question whether studying aquatic animals can truly better our community. In this short column, I would like to tell everyone the various realistic applications of marine biology.

Our laboratory, Marine Genetics and Life Science, conducts genetic researches using flatfish for three major purposes – “food production”, “wild environment protection”, and potential “medical application.”

Flatfishes are produced in aquaculture facilities for two main reasons. First is the commercial purpose, as we commonly know. Second is the restoration of wild stock. After being reared in hatcheries, fishes are released to the ocean to replenish the wild population. However, hatchery-reared flatfishes very often develop abnormal morphology. This is a critical problem to resolve in fisheries industry, as it decreases the commercial value of products and lowers the survival rate of the stock after released to the wild. Therefore, by understanding the mechanism of abnormal development in fish, we can maximize the efficiency of food production and also protect the wild environment.

On top of the two purposes, another potential application of marine genetics study is “medical contribution”. Humans and fish share 70% of genome that the knowledge on fish DNA is highly likely relatable to the human DNA. In short, by understanding the genetic mechanism of critical development in fish, we can further understand the potential genes that affect the development in humans.

From: Neha Pandey
As many of you know, the emerging disease Covid-19, or coronavirus respiratory disease, has recently been declared pandemic by the World Health Organization. The disease itself has been causing widespread panic all over the globe with the number of patients greatly increasing, especially in Europe.

The situation in Sendai city and Miyagi prefecture is considered good. In Miyagi Prefecture, there are currently five active patients.

However, it is still important that we take extra precaution to help prevent the spreading of the virus. Everyone returning to Tohoku University is requested to self-quarantine at the dorms or their home for 14 days with limited visits to the university campuses and other public spaces. Social distancing is recommended for the foreseeable future to prevent asymptomatic people from infecting the most vulnerable in society.

If you are feeling unwell and would like to visit the University Health Care centers, please note you will have to make a reservation in advance by phone in Japanese, or have someone with you who can translate.

Contact Information for COVID-19

General consultation hotline for Novel Coronavirus Disease (COVID-19):
TEL: (022) 211-3883 (24 hours, 7 days a week service)

Please contact them if you have cold-like symptoms or a fever (37.5°C or higher) which has continued for four days or longer, feel lethargic, or have difficulty breathing.

Kawauchi Student Health Care Center:
TEL: 022-795-7829 to make a reservation (available weekdays 9:00 - 11:30; 13:00 - 16:00)

If you need interpretation support please call the Interpretation Support Hotline of the Sendai Multicultural Center:
TEL: (022) 224-1919 (available from 9:00 - 17:00)

Useful Japanese Phrase

Here are some phrase and vocabulary that is useful in the hospital (病院 - byouin):

気分が悪いです - kibunga waruidesu = I feel sick
熱があります - netsuga arimasu = I have a fever
咳が出ます - sekiga demasu = I have a cough
息が苦しいです - ikiga kurushiidesu = I have difficulty in breathing
病院はどこですか? - byouinwa dokodesuka? = where is the hospital?