

FGL Community NEWSLETTER

Autumn 2022

With the winds getting colder and the days shorter, it's that time of the year again: the long-awaited Fall!

Now that the Summer heat has passed, the leaves are changing their colors and falling to the streets, making for satisfyingly crunchy walks. The start of fall also signifies the start of the new semester, the official welcoming for new FGL students, and the graduation of our seniors!

To all our new students: Welcome! We hope you can start your studies here in Tohoku University in a good mood, and that you may enjoy your time here up until the day you graduate. Speaking of graduation, we would also like to extend our congratulations to the FGL Program's recent graduates. It was an honor being able to spend time with all of you, and we wish you all the best for the journey ahead!

Do remember to dress warmly, and to take a second to look at the beautiful colors of the leaves this Fall amidst your busy schedules. In this edition's seasonal article, we have included information on activities you can do to enjoy the Fall season in Sendai. Moreover, this season's newsletter features a sneak peek into the research article of one of our recent graduates, and interviews with a teacher and senpai!!

We hope you have a terrific Fall, and enjoy reading!

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ASK SENSEI

Prof. Yuki Watabe



Interviewed by TK; written by Steven

In this season's Ask Sensei, we have decided to interview Professor Yuki Watabe. Although not part of the FGL faculty, she has experience with teaching international students, such as in the class Advanced Global Seminars, and guiding domestic students who want to study abroad.

After 8 years in the same all-girls school from junior high school through college, she traveled abroad to the U.S. as an exchange student, and decided to commit and finish her Bachelor's degree there. During her stay there, she balanced finding a job, being a member of the Department of International Education to help other Japanese students, and pursuing both her Master's and Doctorate's degree at the University of Minnesota in the same field. As her job requires an extensive amount of effort and time, she gets leisure from activities like cooking and taking walks to enjoy the city's scenery.

In the classes that she teaches, not much is expected from the students other than active participation and the motivation to learn. As a teacher, she doesn't feel like someone who has to provide information to her students, but rather as a facilitator who helps the class share information with each other. Luckily enough, as most of her students are international students who have come a long way to Japan for their education, they are motivated enough to focus and participate in class.

Talking about international students, as recently the Covid-19 restrictions have been lowered, more and more international students are able to enter Japan as well, and Prof. Yuki would be happy to meet more students from many different countries. With the increasing influx, she has heard complaints from students who think that Japanese people are a bit shy and reserved, hence not participating so much in classes. However, she thinks that such things are only a matter of cultural background. Even though most international students are more straightforward, some can be shy as well. Along with that, although most domestic students tend to be quiet at first, they will open up more as they get more familiar with each other in the class.

Now, we would like to quote her answers to some of our "out-of-the-topic" interview questions.

ASK SENSEI Prof. Yuki Watabe

As someone who has spent a long time in the international education field, she has heard the misconception that internationalization is not for every university. However, she strongly believes that in a world of advancing globalization, internationalization is important for adaptation in a society that is becoming more diverse due to quick information exchange around the world.

Now, we would like to quote her answers to some of our "out-of-the-topic" interview questions.

"We would like to know what you think about social status perception in Japan. Specifically, since countries in the west are more accepting towards groups of LBTQ+ people, how do you think is the situation in Japan?"

"I think now our society is becoming more open to the differences about those gender issues. Even though in a way we understand, sometimes it is difficult for people to actually accept and understand the situation. Even more, changing our attitude is another challenge all on its own. Way back, when I left Japan more than 20 years ago, nobody discussed such things in the open. But now, people can talk about it, especially younger people who are more open, unlike older people who have been living in a different era who would need more time to adapt. The same thing happened to me back in the U.S., as I have a close friend whose sister is a lesbian. Their mother never understood the sister, even until near the end of the mother's life, she saw her being lesbian as a disease that can be cured. The older generations have their own beliefs, which don't necessarily depend on the country. However, I think in Japan, we are progressing towards a more understanding society. Importantly, we also need to change our attitude towards a more accepting society."

ASK SENSEI Prof. Yuki Watabe

"If you could see a measuring scale above people's head, what would you want this scale to measure? Their status in society, their level of happiness, their wealth, etc.?"

"I don't want to see anything, because those measures might be useful as a group to improve society, but I don't want to use them when I work and meet with individuals, because I feel that they are so judgmental. So I really would like to discover and understand them by myself. If the measurement were used by governments, to measure the nation's happiness for example, I think it would be really helpful. However, when used to understand individuals, we might have prejudice and stereotypes based on the measurement."

"What are three things that are on your bucket list?"

"First, I really want to travel, like on a world trip. As I mentioned that my field is in comparative international development education, I didn't have much time to be involved in international development as I spent more time in comparative education. So, after I retire, I would like to join the 海外青年協力隊 of JICA (Japan International Cooperation Agency) to keep helping other people, and that is two things on my bucket list. The last one, since I have lived in another country and worked with international students, communication is sometimes difficult. So, I have an interest in participating in activities such as reading books to kids, or reading guideline books to blind people."

Other quote-worthy messages passed on along the interviews are, "Try moving out of your comfort zone", "Listen to other people well to understand them," and other messages with the extent of understanding and tolerating others despite their differences in culture or background.

Research Article

Tah Andrew Ryan

4th Year AMB Student

"The Study of Growth and Dietary Habits of Salmon Sharks in Japan"

Interviewed by Ryan and Aroob

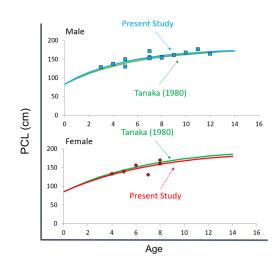
You may have heard of the "shark-finning" taboo, which is infamous on the Western side of the world, that managed to create this stigmatic shroud over the use of shark as seafood. However, the fact is that sharks are actively fished in Kesennuma, Japan, contributing to most of the total shark landings in Japan! Among the fished sharks there, the salmon shark (*Lamna ditropis*), which is only found in the North Pacific Ocean, is the second-largest contributor, which justifies the necessity for sustainable resource management. However, the last study done on the shark in Japan was over 40 years ago which begs the necessity of updated data. As such, this study aims to elucidate the basic biology of *L. ditropis* such as growth and feeding habits. Across this study, a total of 54 specimens of salmon shark was used.

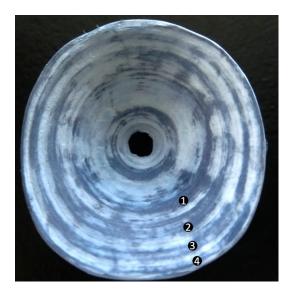


Age Determination and Creation of Growth Curve

In analyzing the population dynamics of fish, one of the most crucial aspects is the growth curve—a curve that represents the average relationship between age and length of a specific species. In this study, age determination was done using the vertebrae, which were procured from a processing factory in Kesennuma city. The vertebrae were used for age determination due to the absence of otolith—a more commonly used, more stable organ used for age determination—in sharks.

Muscle tissue on the vertebrae was removed before the vertebrae are stained to clearly reveal the growth bands, directly visible on the vertebral body. Afterwards, a Von Bertalanffy Growth Function (VBGF) was created to show this relationship. The analysis reveals that the sharks' age range between 4 to 12 years old, with 5-year-old sharks contributing the most. It also clarifies that the VBGF for male sharks is similar to the one from the study from 40 years ago (Tanaka 1980), while the female shark growth curve is noticeably different, possibly just due to too small of a sample size.





Diet Analysis

The components of a fish's prey can reveal a lot of information regarding its biology and migration patterns. In this study, muscle tissue stable isotope analysis (SIA) using mass spectrometry was done to analyze the potential food sources of these sharks. Approximately 1g of muscle tissue per sample was freeze-fried and then used for mass spectrometry, which takes about 10 minutes per sample. SI results were plotted together with SI data from potential prey animals to reveal potential food sources and their contribution to the diet of the shark. The results did not show a high match with a potential diet data recovered from previously reported research, suggesting that either the potential prey data is insufficient and low trophic level fishes are the main prey, or that the isotope enrichment factors of these sharks are extremely low. In any case, SIA research on other shark species and the study of actual feeding habits of *L. ditropis* (e.g., stomach content analysis) are necessary to clarify these problems.

ASK SENPAI

Aziz Faizullah Abidin (Aziz)

IMAC-U 4th Year Interviewed by Ryu and Suryo



Q : Can you tell us a bit about yourself?

Aziz : Hi, I am Aziz, a senior FGL IMAC-U student from Indonesia. Most people probably know me as the 2022 Tohoku University International Festival (TUIF) Leader, or maybe from my other activities as a TUSTEM Leader, SenTIA/Sendai cultural volunteer, or just as good friends.

International cultural/language exchange or community activities are some of my favorite pastimes, so I think I am viewed as a generally outgoing and active person. But truthfully, I have introverted hobbies, mainly reading and single-player games. My favorite books are Japanese Light Novels (LNs), most notably the Monogatari Series, Hakomari, and Unnamed Memory.

Besides Otaku books, I also like reading Novels by Mishima Yukio (Kinkakuji & Houjou no Umi). Overall, I have read about 150 books in Japanese since coming to Japan, and I think it helped me a lot to learn the language. I am also a big fan of rhythm games, especially Osu!, and have been playing it for about 10 years.

It is ironic how people say they generally think I am busy (I kind of am, but not to the extent that most people think), so people refrain from inviting me to places and events, but that just makes me free and I end up busying myself finding activities. So I end up busy, but only then do I get invites that I have to decline. So the image of me being always busy just gets worse (lol)

Invite me somewhere and we can touch grass together!

Q: Why did you choose IMAC-U at Tohoku University?

Aziz : It is one of the best, if not best, courses to study Aerospace (as the name suggests!), and Tohoku University is well known for its student body diversity, with the serene environment that is Sendai city. That striking balance is what attracted me to IMAC-U at Tohoku University.

Q : Can you tell us about your study until now in the FGL program? Are there any fun moments or something different?

Aziz : The first-year classes were especially fun, as they had broad subjects with very interesting teachers (the FGL sensei) and we were still together as one FGL batch. What felt different, at least compared to my peers back in Indonesia, was how around the 2nd-3rd year, the semester was divided into quarters and there would be mid and final exams (which are only 3~4 weeks after classes start!). The way classes are conducted feels generally high-paced but also rewarding. I do feel that some subjects end up lacking exploration because of the time constraint or that they, unfortunately, don't match up with my current research.

Q : Can you tell me about the research you are doing? What do you plan to do in the future? (master's degree or job hunting)

Aziz : My current thesis research is about the Computation/Simulation of Multicomponent Flow. More specifically, proving the conservation of Energy and Enthalpy. Simply put, current models often assume the air around aeroplanes to contain only 1 gas, my research assumes there are 2 or more (e.g. Oxygen and Hydrogen) with complex physics. I am trying to build a model that accurately shows the physics and is compatible with computer simulation. At this stage, as the research is more fundamental than practical, the content is around 70% maths, 20% physics, and 10% coding. I haven't completely decided what I will do in the near future, but I will be applying for both master's (IMAC-G) and competitive jobs in Japan (mainly in consulting and engineering management). The one I can get that is more accelerative to my career will be the one I take, but I think having many options is nice.

If the opportunity arrives, I don't mind staying longer in Japan or generally abroad. But I do plan to go back home to Indonesia in my career, eventually. Either permanently, or at least be in a financially sustainable position to go back every year with (hopefully) my future family.

Q : Can you tell us about your favorite places and foods and can you tell us the reason or story behind them?

I don't specifically have a favorite place in Sendai, because it is the people who are my favorite. Any place where you can meet new people and strike up a conversation is great! My recommendation is Halal Hub and the new smoothie cafe beside it, mainly because the owner is super nice and you can often meet other foreigners and Japanese people there. I do believe they have events like English Friday, so take a look if you can!

My favorite food in Sendai has to be the Custard Taiyaki of Taikichi, without a doubt. Just try it, no story or explanation is needed.

What to do during AUTUMN in Sendai ?

written by Wei-Wei

Zuihoden Temple

Autumn/Fall in Japan is the best season to do sightseeing around town. Since the color of leaves is gradually turning into these warm colors, you can enjoy a completely different view in comparison to the one you had in Summer! To create your own best memory in this beautiful season, it is recommended to participate in some events and visit the places featuring these gorgeous foliage.

Zuihoden Temple, which is one of the most famous attractions in Sendai, is going to hold a Momiji-meguri event from November 18th to November 27th. There are many kinds of trees planted here such as Oo-momiji, irohamomiji (Japanese maple), and ginkgo that make the whole garden splattered with various colors. Accompanying the temple featuring Momoyama architecture, it is definitely a felicitous spot for those who are enthusiastic about photography. It is noticed that there will be illumination from 15:30 to 16:50 every day. Don't miss the perfect timing to take the pictures!



Autumn foliage inside Zuihoden

(Resource: https://www.zuihoden.com/autumn/2389)

Akiuluminart

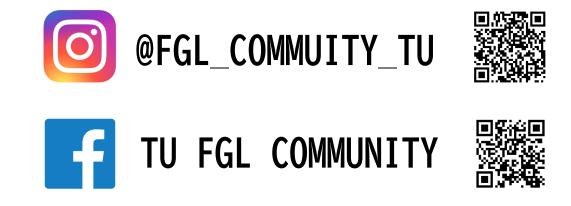
If you have more of the artistic soul, there is a suitable event for you: Akiuluminart. Which is going to be held in Akiu, a place which is well known for its hot springs. During November 26th to December 25th, works of many artists will be exhibited in the stores around the Akiu area.

It is also convenient for those who live downtown of Sendai to visit Akiu since there are shuttle buses from Sendai station to Akiu every day. You can choose one of the weekends during the event period and have a one-day trip to this small town. All the stores can be easily accessed by walking. After doing your bit of art appreciation, you can enjoy the famous hot springs here with a reasonable fee, which will be a perfect way to end the day. Don't forget to check their website if you are interested in this event! Link: https://www.akiulumina.jp/art.html



Akiuluminart official website







Mascot design by Sera Koo