

2018 Re-inventing Japan Project (Long-Term)

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Studying abroad is an amazing experience that will turn your world upside down and show you another perspective of reality. In my case, it literally happened. With 12 hours difference from my hometown, I found myself on the other side of the world. Totally different culture, food, language... And I was amazed with it.

Since my first year at University of São Paulo I knew about the partnership with Tokyo University of Agriculture. I remember watching a lecture about this program at that time and I also met students who participated Re-inventing Japan Project before. I knew this program could bring students another type of knowledge, experiences and perspectives that we're not used to see in Brazil.

As food science student, one of my biggest concerns is about the world's growing population, food production and environment preservation. Crop production is vital to Japan despite limited arable land that is around 13% of the total area. Is a very different reality from Brazil, Japan has to plant more in less space. So, face this reality could be an interesting opportunity to open our eyes. In a few years, technologies for plant more in less space could save the world from malnutrition. I'm also interested in studying soybean and I admire the process of fermentation to obtain natural umami used for the production of shoyu, missô, natto, among others.

So I worked hard for two years (studying English, participating of international symposium, researching) to apply for this program during my third year. CIP (Center for

International Programs) has helped us from the beginning. I'm grateful for all help, kindness and attention. All international students were received with a kind welcome party.



Picture 1 - Welcome party for visiting students

Nodai offered us, besides the subjects in English, Japanese language course conducted in English, which helped me a lot. I learned basics kanjis and grammar, we practiced listening and speaking and it was essential for living in Tokyo. On the last Japanese language class, we had *shodō* practice (書道). It was a unique experience to apply all that we have been learned during the semester to enjoy the beauty of kanji calligraphy.



Picture 2 - *shodō* class (書道)



Picture 3 - *shodō* class (書道)

In Tokyo University of Agriculture, there is a special program that offers a total of 26 specialized courses conducted in English. This provides an opportunity for Japanese and international students at Tokyo University of Agriculture (Tokyo NODAI), as well as visiting students from the global partner universities to learn about food, agriculture and environment in Japan and Asia. I decided to join *Global Food Systems, Life History and Application of Landscape Plants, Planning and Design of Landscape Architecture, Vegetable Production Technologies for International Cooperation* and *Comparative Nature Study from Cultural Perspective* classes.

In “*Global Food Systems*” we discussed many aspects of Japanese culture in an economic perspective and how Japanese diet have been changing now a days with influence of others cultures. I notice the importance of rice for Japan and how this source of nutritional energy is now been replaced for wheat in breads and pasta. Hayashi Masanori sensei showed us relevant statistics, such as percentage of consumption of rice in Japan, food importation, among others. We also prepared presentations about a crop in our country and we explained the importance for our culture, the percentage of production comparing to the world, how we consume it and more. In this class, I learned more about Japan’s culture, about the most famous types of washoku (和食) that has been added to UNESCO's Intangible Cultural Heritage list, traditional events and how food is related with them, and we had contact with Japanese students that also were very enthusiastic for exchanging ideas and explaining more about their country for us.

“Life History and Application of Landscape Plants”, with Suzuki Kojiro sensei, was one of my favorite classes where had the opportunity to know a lot about Tokyo and the surrounding area. We went to Hayano Seichi Park (早野聖地公園) for field study that is located in Kanagawa prefecture, at Kawasaki city. We had the opportunity to go there two times. That forest is a good example of the concept of satoyama, that Kojiro Suzuki sensei exemplified us. Satoyama (里山) is a Japanese term applied to the border zone or area between mountain foothills and arable flat land. Literally, sato (里) means village, and yama (山) means hill or mountain. Satoyama has been developed through centuries of small scale agricultural and forestry use. In this forest, much bamboo is invading the area of native plants. We understood the importance of Satoyama for

Japanese community in an ecological, economic and religious way and the importance to preserve it. We joined a group to cut and collect bamboo and takenoko (bamboo shoot) and there was possible to identify many types of native plants. In another field study we went to Tama River (多摩川) area, located next to Noborito Station. There was possible to understand the importance of low vegetation and trees to keep the stability of river shape and soil. It can also protect the city from flooding. We also had others field studies, as visiting the future Olympic Park of 2020 in Odaiba, Sumida River (隅田川) in Asakusa, Universities in Ochanomizu (御茶ノ水), and Kanda Shrine (神田明神 Kanda-myōjin, officially 神田神社 Kanda-jinja) at Tanabata's Day (07/07).

In “Planning and Design of Landscape Architecture” classes, we had many field trips as well. We visited different types Japanese gardens in Tokyo, as Kyu Furukawa garden 旧古河庭園, famous for the exuberant amount of different species of roses. Students from Department of Landscape Architecture Science helped us a lot explaining various aspects of Japanese garden. We visited temples around Nippori area and famous street called Yanaka Ginza. Furthermore, we had the opportunity to admire Asakura Fumio's sculptures at Asakura Carving and Sculptures Museum there. We visited Tsurugaoka Shrine, Egara Tenjin, Hokokuji Temple in Kamakura. After this class, my friends and I decided to see the beautiful Great Buddha of Kamakura. With Kurita Kazuya sensei in other field trip, we climbed Mt. Takao. This was my first time climbing a mount. This mount is closely associated with the Shinto-Buddhist Tengu, minor kami from Japanese folklore. A Buddhist temple, Takaosan Yakuōin Yūkiji, is located on the mountain, and attracts many visitors who pray to the Tengu for good fortune. We reached the top of Mt. Takao and the view was amazing. We could not see Fuji Mountain because that day was cloudy. This class was special for me because we visited traditional, historical and unique places.



Picture 4 – Top of Mt.Takao



Picture 5 - Hokokuji Temple

“Vegetable Production Technologies for International Cooperation” was an enlightening subject that provided us technical knowledge of production of various crops, production bokashi by organic fermentation, varieties of vegetables and different ways of seedling. Shiwachi Hironobu sensei, each class, focused on specifically crops. We studied about seeds, botanic, growing, pruning and harvest.

“Comparative Nature Study from Cultural Perspective” classes allowed us to discuss various cultural aspects of different countries in relation to food, climate, music, stories, theater, poetry, among others. Fukushima Naoko sensei was very attentive and has always encouraged dialogue between all students. Linking students discussing different aspects of their own cultures and how they deal with different social perspectives is an excellent practice for exercising respect and tolerance. I made kind friends on this class, we shared nice moments.

I had opportunity to do internship at the Laboratory of Chemical Analysis, at Department of Chemistry for Life Science and Agriculture, with Hashimoto sensei, who was very attentive and accepted me as her student. Everyone in the lab was very friendly with me and they taught me about chromatography and compound identification. We also

visited the Tama Zoological Park and the Yokohama Hakkeijima Sea Paradise. With them, I learn much more about insects and their pigments. Even if it wasn't directly related with food science area, I have interest in learn more about nature and I believe that what I learned there will be essential for future researches in my area. I'm grateful for the patience and affection that have given me.

CIP (Center for International Programs) also prepare for us many cultural events, such as Cafe Latin America and Ryuugakusei Party (留学生パーティー). In Cafe Latin America, we exchanged our experiences with Japanese students and with who would be interested in studying abroad our learning Portuguese and Spanish. There we met many students from different parts of the world, some of them going to study abroad for México and Brazil. I was a pleasure to talk with them and share a little bit of my country. Ryuugakusei Party was a meeting of international students from NODAI. All students shared their traditional foods, dances, songs. We also introduced ourselves in Japanese for everyone. For Brazil's performance, we danced "Forró" and "Sertanejo".



Picture 6 - (留学生パーティー)



Picture 7 – First Café Latin America

In the last month, we did internship at the non-governmental organization called ERECON – Institute of Environmental Rehabilitation and Conservation (環境修復保全機構) in Machida, Tokyo.

Our Professor Koji Miwa, introduced us to ERECON's works and what the NGO does to help agricultural producers, specifically in Cambodia. They explained us about the problems in some places there and how ERECON provides workshops and technical knowledge to improve their production and preserve the ecosystem using organic liquid fertilizer, organic biopesticide and organic compost.

We visited a forest area with a typical "satoyama" system of production in that city and there we worked with local producers of organic vegetables. They were extremely nice with us. Most of them worked for companies for a long time and, now that they are retired, they want to be connected with nature. All the money that returns is converted to new plantations or workshops, when people of the city can have contact with agriculture. These workshops are also available for elementary school children, so they can understand how our food is planted, grow and arrive in the market. There, we learned how to prepare the soil to sow carrots seeds, pruned eggplants, harvested cucumbers and collected the leftovers for produce organic liquid fertilizer.

On the third day, we participated of a barbecue. We prepared yakisoba, grilled the meat and had a nice talk with them. We asked them some questions about the farm, and we noticed that it was a sustainable way of production. They plant in the middle of forest with no use of water, just the rain to water the crops. All we used for the barbecue was planted in that farm.

We discussed about this kind of production in our countries and how to create a "Satoyama" system based in our country's reality. It was a nice activity because I learned not only about Japan's Satoyama, but learned more about my own country and the necessities of local producers. We shared different realities: From Mexico, Bolivia, North of Brazil and Southeast of Brazil.



Picture 8 – ERECON internship

To all future students, I hope you enjoy a lot this time in Japan. Be open to be in contact with other's culture, make friends and learn. NODAI has so much to teach you, not only in an academic way, but with others international students and Japanese students there... Make sure that, when you come back, you will not be the same person that took the fly to Japan in the beginning.

I would like to thank you USP/ESALQ and NODAI for this unique opportunity. Also to all professors that provide us amazing experiences, to my host professor Hashimoto Kimiko sensei and all lab of Analytical Chemistry of Department of Chemistry for Life Sciences and Agriculture. Thank you very much CIP and special thanks to Naomi and Azael, to all the friends I made from around the world and to Brazilians senpais that helped us a lot too. Also to my family, that helped me a lot, even being on the otherside of the world.