

The pathway to independence in Ph.D. student life abroad: lessons to learn



Matias Siueia Júnior
Ph. D. candidate at Hiroshima University

2023 HISF scholarship recipient

Early academic path

I am Matias Siueia Júnior, born on December 12, 1989, in Maputo, Mozambique's capital. My academic journey commenced in 2008 at Eduardo Mondlane University - Higher School of Rural Development, Mozambique. There, I pursued Agricultural Production, leading to graduation in 2011. A full scholarship from the Government of Mozambique (State Budget) fortified my educational journey, igniting a fervor for agricultural sciences that would shape my path ahead.

Master's studies and professional engagements

Between 2015 and 2017, I embarked on a transformative journey at the Federal University of Lavras in Minas Gerais, Brazil, pursuing a master's degree in Soil Science. Supported by the CNPq/PEC - PEG scholarship, this phase enabled me to delve into the intricacies of Soil Science, exploring domains such as Soil Fertility, Plant Nutrition, Fertilizers and Fertilization, Biofortification, Soil Chemistry, Environmental Pollution, Soil and Plant Analyses, and Ionic Interaction. Afterward, I transitioned into academia at Aquila University, undertaking pivotal roles in molding agricultural education. Presently, I serve as an Assistant Professor and hold the position of Dean at the School of Agricultural Sciences. Simultaneously, my tenure as the Head of the Agriculture and Rural Extension section in the Department of Agriculture, Fisheries, Livestock and Extension at the Municipality of Maputo from 2017 to 2023 intertwined my academic expertise with practical applications, bridging theory and on-ground realities.

Collaborative projects and impact

In 2018, my collaboration with Eduardo Mondlane University - Faculty of Agronomy and Forestry Engineering sparked significant research into soil salinity within Maputo's green zones. This collaborative effort blossomed into the pioneering 'SaliHort' initiative in 2020. This concerted undertaking involved Welweit (Gesellschaft zur Förderung lokaler Initiativen e. V.), Eduardo Mondlane University, ABIODES (Association for Sustainable Development), Municipal Council Maputo, and the Department for Agriculture and Extension. The initiative's primary goal was to tackle the soil salinity challenges impacting vegetable production in Southern Mozambique. This ambitious project fostered collaborative partnerships among local farmers, academia, and students, fostering innovative strategies to combat the adversities caused by salinity.

Transition to doctoral pursuits

My current journey involves pursuing a Ph.D. at Hiroshima University, Department of Integrated Life Sciences, Bioresource Science Program in Japan, graciously sponsored by the Honjo International Scholarship Foundation. Immersed in Plant Nutritional and Physiology research, my focus lies in understanding the intricate dynamics of abiotic stress, particularly salinity's profound impact on rice cultivation—a quintessential crop deeply intertwined with Mozambique's agricultural fabric. This incredible opportunity, guided by the expertise of my advisor Professor Akihiro Ueda in salt stress, became a reality through the Honjo Scholarship, marking a significant milestone as the first Mozambican recipient.

Challenges and testimonials

This journey has only just commenced, and I have three years ahead, with many challenges to overcome. This time the biggest challenge is adapting to life in Japan, the language barrier, the climate, and living in a reality that I have not experienced before. Adapting to the city, the university, integrating with new colleagues in the lab, the dynamics of working in the lab, etc., all these challenges that anyone who goes to study abroad must face. It is a new beginning and, of course, a new story, and these difficulties will quickly be resolved through daily experience.

Scholarships play a crucial role in empowering students by providing the necessary financial support, enabling them to wholly dedicate themselves to their studies without worrying about financial constraints. Beyond mere financial assistance, these scholarships create a platform for groundbreaking research, mentorship opportunities, and the realization of Sustainable Development Goals (SDGs). As an international student, I have encountered firsthand the immense challenge of pursuing education abroad without the aid of scholarships, grappling with the complexities of managing expenses in an unfamiliar setting. It is scholarships that pave the way for students like me, offering the flexibility and support needed to return to our roots and contribute meaningfully to our communities.

In our generation today, we would always meet a lot of people from all over the world. Because of this, we should not have ethnocentric thinking. Things that are right for our country might be wrong for others, and vice versa. We need to really understand regarding our differences. That's why we will learn to become globally-minded here!



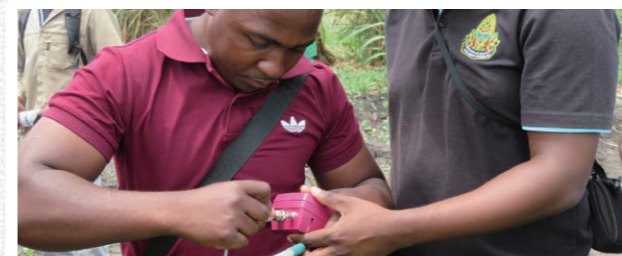
1) Soil salinity equipment test on the field



2) Soils conservation> exchange lessons learning - Foundation for Farming Harare-Zimbabwe



3) Exchange South-South Mozambique - Zimbabwe



4) Soil Salinity Portable Probe Combi 5000



5) Soil Salinity_ Farmer Field School at Massacre de Mbuzine Association



6) Soil salinity _ SPAD Index equipment



7) Soil salinity experiment sweet potatoes <field day>

How Thai students across Japan connected. My involvement with TSAJ.



Bunuasunthon Sukulya

Ph. D. candidate at Osaka University

2023 HISF scholarship recipient

Involvement with TSAJ

This year, I had the privilege of joining the Thai Students' Association in Japan under the Royal Patronage of TSAJ, a non-profit organization committed to supporting Thai students residing in Japan. The association actively organizes events to facilitate connections among Thai students in specific regions. It is an honor to be part of the team for the 2023-2024 term, where I hold the position of Vice President in marketing and social media, while also contributing to the Osaka Prefecture team.

Marketing role and responsibilities

As Vice President, my responsibilities encompass the management of all social media platforms, aiming to enhance engagement. My focus is on creating content that is not only beneficial for students living in Japan but also for those in Thailand. Given that our team comprises individuals currently residing in Japan, the majority of our content revolves around daily life sharing, essential aspects of life in Japan, and insights into studying abroad. Our goal is for each piece of content to benefit not only



Online seminar

those living in Japan but also anyone interested in or preparing to come to Japan for their studies. Starting from this year term, my team has launched more than 20 pieces of content on our official Facebook page, aiming to showcase the experiences of students studying in Japan, providing tips, tricks, and cautions about life in Japan.

Engagement in Osaka prefecture team

In addition to my role in the marketing team, I am also in charge of the Osaka Prefecture team. My role involves supporting Thai students residing in Osaka Prefecture and organizing events to foster connections among students. This year, I successfully hosted three events during spring, summer, and fall, providing opportunities for students to get to know each other. It is noteworthy that each prefecture, including Kyoto, Hyogo, Nara, Tokyo, Hokkaido, Sendai, and Mie, has its own designated person in charge. Each prefecture is responsible for organizing at least one activity to bring together both new and old students, ensuring that students across all prefectures have the opportunity to connect and build a supportive community. Importantly, our activities are not exclusive to Thai students; we actively encourage and welcome Japanese students to participate as well.

TSAJ activities

In early November of this year, we organized our annual TSAJ Festival, with the event taking place in Osaka. The festival featured various activities, including team-based sightseeing around Osaka with assigned tasks and final presentations. Additionally, we hosted indoor activities with open booths for everyone to participate, such as making Thai snacks (Kanom-Krok), playing board games, fortune-telling, and booth for sponsors. We also invited special guest speakers to provide advice on life in Japan and share their experiences of job

hunting in Japan.

Apart from on-site activities, we also conduct online seminars for those in Thailand or unable to attend in person. Our recent project focuses on topics related to job hunting and studying in Japan, providing valuable insights for individuals living abroad. This initiative serves as a significant opportunity for everyone to understand the preparation process before coming to Japan and gain in-depth information to make informed decisions. Holding these events not only benefits us but also allows us to expand our network, connecting with new individuals and reassuring them that they will have our support if they choose to come to Japan.



TSAJ team 2022-2023 and 2023-2024 and Thai Embassy officers



TSAJ festival 2023/11/18 @MY Dome OSAKA

エッセイ ⑨

Intersecting technology and culture: A global research journey



Chauhan Vishal

Ph. D. candidate at the University of Tokyo

2023 HISF scholarship recipient

Introduction

In the realm of cutting-edge technology and innovation, I, Vishal Chauhan, stand as a beacon of inspiration and achievement. Currently pursuing my doctoral studies at the University of Tokyo, my journey over the past year reflects a remarkable odyssey through research, academia, and global exploration.

With a foundation in Information Technology, I have left an indelible mark on the international stage, presenting my research papers and undertaking research internships in six different countries: Taiwan, Singapore, the USA, Malaysia, France, and Portugal. This whirlwind tour of academic and cultural landscapes has not only broadened my horizons but has also significantly shaped my perspective on the intersection of technology and society.



Singapore Picture Nanyang Technological University

Robotics endeavor in Taiwan

My standout projects unfolded at the National Chung Cheng University in Taiwan, where I delved into the intricate world of robotics. Employing an RGB-D Camera and 3D Point Cloud Processing, I pioneered a project focused on detecting workable regions for mobile robots. The successful completion of this endeavor within stipulated timelines underscored my unwavering commitment to precision and advancement in the field.

My passion for Python and Artificial Intelligence has manifested in a compelling ongoing project in Taiwan, where I utilize perceptual engineering to craft an online app that recommends outputs based on user searches. This project showcases my prowess in marrying technology with user-centric design principles. The prospect of exploring extended reality studies in diverse global settings has captured my imagination. Eager to immerse myself in elite and competitive educational environments, I envision furthering my academic pursuits while contributing to the international discourse in robotics and artificial intelligence. My extensive research has led me to institutions renowned for their excellence and global alumni network, aligning seamlessly with my ambitious academic and career aspirations.

Versatility in sports and leadership

Beyond the confines of academia, I am a dynamic individual with a zest for sports and community engagement. My prowess in table tennis, volleyball, cricket, and mountain biking is a testament to my versatility. Notably, as the captain

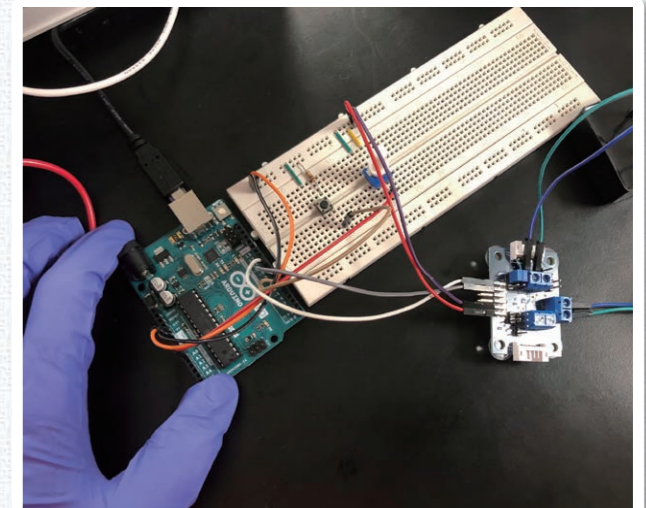


Singapore Picture Nanyang Technological University ①

of my school's cricket team during higher secondary school, I exhibited leadership qualities that have undoubtedly contributed to my success.

Community engagement is not just a buzzword for me; it's a way of life. Actively participating in various science exhibitions and cultural programs as a volunteer, I exemplify dedication to giving back and fostering curiosity within the community.

As I continue to carve my niche at the forefront of robotics and artificial intelligence, my journey is not merely a collection of experiences but a testament to the limitless possibilities that unfold when passion meets dedication. The world eagerly anticipates the contributions of this driven and accomplished individual as I shape the future of technology on a global scale.



Singapore Picture Nanyang Technological University ②



Portugal Picture



The journey to my dreams



Lusubilo Mwalilino

Ph.D. candidate at Kumamoto University

2020~2022 HISF scholarship recipient

Introduction and background

Hello! My name is Lusubilo Mwalilino. I am 23 years old and come from the warm heart of Africa, Malawi. Currently, I am a second-year PhD student studying stem cells at Kumamoto University here in Japan. You might be wondering, where is Malawi? Or, what are stem cells? Well, you are in luck because I know a bit of both.

Family and Education

Malawi is a small country in southeast Africa with about 19 million people. It has a very large lake known as Lake Malawi, the 3rd largest lake in Africa and the 9th largest lake in the world. We Malawians take pride not only in the lake but in the kindness of our people; that is why Malawi is known as the warm heart of Africa. If you visit, expect to see many wildlife in different National parks and enjoy the tropical savannah climate, which isn't too hot or cold. That said, the sun can be scorching at certain times of the year due to climate change.

Journey in Japan and stem cells studies

Now that you know a bit about where I am from, let me tell you about myself. I was born and raised in a family of six: my parents, myself and three younger sisters. As a girls-only family in a country where traditional gender roles still prevail, my father always strived and still does to ensure that my sisters and I could get the best education. This, of course, comes at an expensive price and coming from an underdeveloped country makes it even harder. However, my parents allowed me to study what I desired in a different country, away from home, at 15. I am genuinely grateful for the sacrifices they made and still do make for my sisters and me. I completed my undergraduate studies with first-class honours in a Bachelor of Science (Biotechnology) (Hons) in 2020. I got a study grant based on



my performance during my studies, which helped ease my parents' financial burden. It was during my undergraduate course that I learned of stem cells and how they can give rise to any cell type of the body. I knew I wanted to know more about these cells, and so the search for an internship began.

Internship challenges and scholarship impact

Japan stood out to me because when I was younger, my dad visited Japan for three months for his training. Additionally, a Japanese scientist, Shinya Yamanaka, won the Nobel Prize for his excellent research on induced pluripotent stem cells. I took the initiative to research different labs and sent emails to those I was interested in. My current supervisor, Dr. Hitoshi Niwa, responded, telling me I could intern for ten weeks with all expenses paid. I was ecstatic, and that is how I got to Japan.

Starting my internship at the beginning of the COVID-19 pandemic proved challenging, but it was during my internship that I found out about the Honjo International Scholarship Foundation. They propelled me into my future, allowing me to focus on my studies alongside showing my sisters that they too, can. I graduated with my Master's in Medical Sciences in September of 2022.

My experience in Japan thus far has had its ups and downs, which many of you can relate to. However, these challenges have helped shape who I am and will be. My Japanese has improved, and so has my resilience. My goals and dreams keep getting refined as time passes. While striving for them, I also find ways to relax by making music, painting and being out in nature! After all, rest is just as important.

Gratitude and future aspirations

As an alumnus of the Honjo Scholarship Foundation, this foundation has been pivotal in my future trajectory. I will always be a part of this family no matter where I go, and the connections I have made here are lifelong. I truly am grateful and proud to be a member of such a brilliant foundation.

I look forward to what the future has in store for me and in what ways I can contribute to society. Thank you!

Saving endangered animals by studying their DNA: Conservation genomics of White-tailed eagle



Azhari Abdurrahman Fadel

Master's candidate at Kyoto University

2023 HISF scholarship recipient

Background and childhood influences

My name is Fadel. I grew up until 6 or 7 years old in Kanagawa-ken and then went back to Indonesia and did my primary to high school there. After that, I returned to Japan as an undergraduate student at Kyushu University. My early childhood in Japan exposed me to the culture of being fond of animals. Indeed, the memory of catching dragonflies or looking for stag beetles in the summer with my mom 15 years ago is still vivid. These childhood experiences instilled 2 things in me: my love for Japan as a country and my love for animals. When I came back to Indonesia, all that I watched on the TV was Discovery Channel, NatGeo, Animal Planets, etc. I had a calling from a very young age that I want to put all my effort during my life to preserve biodiversity. That is why when I went to undergraduate in Japan, I chose a place where there was this fantastic teacher on biodiversity conservation, Araya Kunio Sensei. Under him, I learned conservation genetics and my species of research was a popular aquatic beetle in Japan called *Cybister rugosus*. Now, because my ultimate goal is to conserve biodiversity and not just a single species, I believe that I need to try a whole different species with a different method in my master's.

Academic journey in Japan

That's why I decided to move to Kyoto University's Wildlife Research Centre, where I can move from studying aquatic beetles to big predators such as eagles with different methods. Different to undergraduate study, instead of insects, in my Master's Course, I aim to study a keystone species with a different methodology to expand my knowledge of conservation genetics. Thus, for my research plan for masters, I aim to perform whole genome analyses of Japanese and European White-tailed eagles,

Haliaeetus albicilla, which is considered an Endangered Species by the Ministry of Environment of Japan. I also plan to conduct population viability analysis (PVA) of the Japanese captive population. My research infers the population structure of White-tailed eagles, estimates their genetic diversity level, and informs the best breeding strategy for the captive population. Thus, information obtained from this research will be useful for developing effective conservation strategies, including the integration of in-situ and ex-situ approaches.

Vision and future goals

I hope that in the end, I have a holistic view and I master the many methodologies in conservation genetics so that I can save many different species in different parts of the world, be it orangutans in Indonesia or Rhinos in Serengeti, Africa. That is also the reason why I chose genetics for my purpose. If I specifically study an ecosystem of a species, it is hard to apply it to save a completely different animal. But if I study DNA, I can use that knowledge to save many animals and plants from the genetic point of view.

In the far future, I would like to be a professor in the field of conservation science while also joining the International Union of Conservation Science, where I can contribute globally by making guidelines about wildlife conservation.

