TO: Nakatani Foundation

Nakatani RIES 2025 Final Report

Your Name: Nia Desai

Your university: Tohoku University

Host Lab in Japan: Ohta Lab (Biomedical Fluid Dynamics Lab)

Meaning of Nakatani RIES Fellowship: How would you describe the meaning/impact of the Nakatani RIES Fellowship?

The Nakatani RIES fellowship allows us to experience another culture, life, academic setting, and people to the fullest. While many people get to visit Japan, we were given the opportunity to form connections across the world that leave a lasting impact on both our personal and professional lives. We were lucky to learn so much about such a unique place and grow as both students and young adults.

Complete the following sentences with the intended audience for these responses being potential applicants to the Nakatani RIES Fellowship.

- My favorite experience in Japan was...
 - o Travelling on the weekend with the other fellows, Okinawa was definitely a highlight
- Before I left for Japan, I wish I had...
 - Packed less and planned more
- While I was in Japan, I wish I had...
 - Visited Hiroshima and more of southern Japan

Research Internship Overview: Provide a description of your research project and experience during your research internship. How did your project relate to your current or future academic interests? What was the experience of working in international research setting like? What will you take away from your research experience this summer and what impact do you think this has had or will have on your future academic career or research interests?

My research project was centered around simulating strokes using computational fluid dynamics (CFD) analysis. This was an independent project that was inspired by my prior lab/clinical experience and is of high relevance to my future, as stroke and vascular neurology is a field that I would like to pursue. Working in an international lab was an incredible experience that allowed me to grow tremendously both as a researcher and as a person. The language barrier was the biggest challenge, but it also taught me a great deal about how important global collaboration and communication are to the rise of new ideas in research. The Japanese and American mindsets are wholly different, one might even say in some ways completely opposite, and this allowed me to learn and think in a way that I hadn't before.

Lab Environment Overview: Provide an overview of what the personal environment of the lab was like. Describe the personality and working style of your research group? What was it like working with your research mentor/s and the overall group dynamic in the lab?

My lab in Japan was completely computational, so the experience was a bit different from the

other fellows, as these labs are inherently more individual work and less collaborative. My mentors both had their own individual projects apart from mine, so I didn't necessarily work with them on a day-to-day basis, but they were always available for help if I needed. My PI was very involved with every student and held personal meetings with each of us every week. He was also very approachable and dedicated to his students. Most people in the lab were Japanese or could speak Japanese, so there was a clear language barrier sometimes. However, everybody, regardless of their English fluency, was very friendly and welcoming. I especially enjoyed spending time with the other 2 undergraduates in the lab, as my GT lab doesn't have any other undergraduates, so this was a nice change for me.

Daily Life in Japan: Provide an overview of what your daily life was like in Japan. This could include the people you interacted with outside the lab on a day-to-day basis, food, your housing/living experience, your travels around Japan and the challenges you faced and the rewarding experiences you encountered over the course of the summer.

My day usually started with breakfast at a coffee shop. Because this was a daily routine, I made friends in a few coffee shops around Sendai and usually went to these. I was often asked to help in practicing some English phrases, and I got to practice a little bit of Japanese as well. I was even asked a few times if they could take my picture and promote the coffee shop on social media as a place enjoyed by foreigners and Japanese alike, which was very fun. This was usually followed by a trip to the supermarket for my lunch. I've always enjoyed visiting the supermarket in different countries, and Japan was one of the best. I never left without my yaki imo for the day. I then went into lab and did some work before taking my lunch in the lab lounge. I usually finished work around 5-6 PM and went to Sendai station with the other US fellow to roam, shop, and eat dinner. I was especially lucky that my lab was on the campus closest to Sendai station, so I was able to go nearly every day. Then we would eat dinner and head back to our dorm. I didn't cook even a single meal, so I was able to enjoy the cuisine to the fullest. Every single weekend was spent travelling all over Japan. I ended up visiting Ginzan Onsen in Yamagata prefecture, Okinawa, Osaka, Matsushima Bay, Hokkaido, Kyoto (twice), Tokyo (also twice), Hakone, and Koyasan in Wakayama prefecture.

Experiences with Japanese Culture: Provide an overview of your most meaningful experiences with Japanese culture. This could be program activities or interactions you had with your lab or within your daily life in Japan that you think best exemplify aspects of Japanese culture or values. What did the experience/s teach you about Japan? What did they teach you about yourself?

I think living in Sendai was in itself one of the best and most meaningful experiences of the summer. I believe this is due to two main reasons. First, people in Sendai are extremely friendly, and second, there are considerably fewer tourists, so foreigners aren't so common. Because of this, I feel I truly got to know the locals and that they also wanted to get to know me. Whether it was shopkeepers, the hair salon stylists, or restaurant owners, I was frequently asked where I was from, what I was doing in Sendai, and so on. These small conversations I got to have with strangers taught me quite a bit about Japanese people and Japanese culture, and they were often the highlight of my day. I also improved my language skills this way, as English is less common in Sendai. I learned a great deal about how important it is to be disciplined, especially when no one is there to keep you accountable. I also learned how important it is to dedicate yourself fully to your task, no matter what it may be, and how this outlook progresses our society and environment, allowing collective, and ultimately personal growth.