

Report on completion of the short-stay study abroad program in FY 2010

School and department: Life Science; Genetics

Name: Timothy Adrian anak Joseph Jinam

Destination country: Germany

Receiving institute: Max Planck Institute for Evolutionary Anthropology, Leipzig
Department of Evolutionary Genetics,
Molecular Anthropology group.

Period of study: 19 June 2010 to 16 September 2010/09/30

A general description of the receiving institute

The Max Planck Institute for Evolutionary Anthropology (MPI) is located in the city of Leipzig on the eastern side of Germany. It takes roughly 1 hour to reach the institute from the main train station via walking, although it is accessible by public transport using local tram cars. The institute consists of 2 main buildings for experiments and general purposes, respectively. The research focus of the institute can be summarized as “...to investigate the history of humankind from an interdisciplinary perspective with the help of comparative analyses of genes, cultures, cognitive abilities, languages and social systems of past and present human populations as well as those of primates closely related to human beings”, as described in their official webpage. There are 5 departments within the institute: Developmental and Comparative Psychology; Primatology, Linguistics, Human Evolution and Evolutionary Genetics. During the course of my short stay program, I was under the supervision of Mark Stoneking, who heads the Molecular Anthropology group in the department of Evolutionary Genetics.



Preparations before leaving Japan

I learned of the Study Abroad Program from another student in my lab, who spent a few months in Barcelona, Spain under the program. After discussing with my supervisor

(Saitou Naruya), he suggested Mark Stoneking as suitable host for my short stay program. Not only have they known each other for a long time, the research theme in Mark Stoneking's lab fits very well with my current research. After several email communications with him regarding my proposed research plan, he gladly agreed to host my stay. He also generously agreed to fund the experiments that I would be doing in his laboratory.

Other preparations included finding accommodation in Leipzig, in which case Mark Stoneking's secretary helped to find a fully-furnished apartment not far from the institute. As a Malaysian citizen, I did not require a visa to enter Germany and I can stay for up to 90 days without visa. With other travel documents and funds ready, I was off to Leipzig.

Research activities during the stay

One of objectives during this study abroad program was to generate new genetic data in some human population samples. More specifically, I performed Single Nucleotide Polymorphism (SNP) genotyping using a microarray platform. In addition, I also learned how their group generated complete mitochondrial sequence (mtDNA) data using the Next-Generation Sequencing (NGS) methods. I spent the first few weeks doing the mtDNA sequencing experiments, with the help of lab technicians from Stoneking's group. Hands-on lab experiments involved sample preparation steps and then the samples were sent to a dedicated group for the actual sequencing step.

While waiting for the sequencing group to complete the experiment, I started doing the SNP genotyping experiments. Under the guidance of one of Stoneking's graduate students, I was able to complete the experiments in a few weeks. After completing all of the lab experiments, I spent my remaining time at MPI performing data analysis on both the SNP and complete mtDNA sequence data. Mark Stoneking and his students have helped me a lot in this regard, and I learned some new analysis techniques and programs.

Other than doing lab experiments, I also took part in lab progress meetings where I presented updates of my activities in their lab. I also participated in their weekly journal club discussions. Aside from activities with Stoneking's group, I also attended department seminars where researchers from MPI as well as other institutes presented and discussed openly and freely about their work.

Activities other than research during the stay

During the first week of July, I travelled from Leipzig to Lyon, France to attend the Society for Molecular Biology and Evolution (SMBE) meeting. I had the opportunity to present a poster of my work and to meet and discuss with many researchers and students from around the world.



Photos from Lyon, France during SMBE meeting

On weekends, I sometimes travelled around Leipzig city by bicycle. There are plenty of photogenic spots with old buildings like churches and monuments around the city. It was not surprising since Leipzig was well known as a center for learning and culture in 17th century Europe. In the city square called Augustusplatz, there were plenty of activities held there each weekend such as carnivals, volleyball tournaments and occasionally an open-air orchestra concert.



Photos from around Leipzig city

On my last weekend there, I managed to visit the city of Prague in the neighboring Czech Republic. It took 4 hours to reach there by train. Judging by the number of tourists at the city, Prague seems to be a very popular holiday destination. The main attractions around the city including Prague castle can be easily covered by walking.

Expenses

The return flight to Leipzig was around 250,000 yen (including tax and insurance) using Korean Air and Lufthanza airlines. The registration fee (50,000 yen) for the SMBE meeting in Lyon was also covered by the SOKENDAI Study Abroad grant.

I stayed in an apartment some 20 minutes away by walking from the institute with a monthly rent of 440 Euros. It was fully furnished and the rent included water and electricity bills. Many students and visitors to MPI also stayed at the same apartment block.

As for meals, the cafeteria at MPI serves lunch and dinner on weekdays starting from 4 Euros a meal. It was a good chance to sample many types of local dishes, but sometimes I cooked my own meals at my apartment. The cost of groceries was cheaper compared to Japan and there were plenty of Asian and Indian restaurants around the city center.

Language at the receiving institute

The medium of communication at MPI was English because there were many people of different nationalities at the institute, so communication was not a problem. Outside of the institute, most people tend to speak German, although they can speak English when spoken to.

Things I found difficult (if any)

Although it was summer when I went there, I was very cool and sometimes chilly in Leipzig. Temperatures can sometimes drop to 10°C at night but thankfully my apartment was equipped with heaters. All shops were closed on Sundays, except for a few cafes near the main station. It was at first a bit inconvenient, but I quickly adjusted.

Advice for future applicants

Take this opportunity to establish a good rapport with your host at the receiving institute and use your time there to learn and discuss with other researchers and students. Also, learning the local language may not always be critical, but it will certainly help with daily life or social situations.