

Genetic Polymorphism and Personality in Squirrel Monkeys: JSPS Report

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Host: Professor Miho Inoue-Murayama

Research summary

Previous research has found links between genes and behaviour in a variety of primate species. The goal of this visit was to build on such research by assessing genetic variance of neurotransmitters in two species of South American squirrel monkey. This involved collection of fecal and saliva samples from squirrel monkeys at Edinburgh Zoo and the Japan Monkey Centre, as well as extraction of DNA from samples, and analysis through gel electrophoresis and sequencing. The purpose of this research was to determine the presence and type of polymorphism in each target gene region, and to analyse the relationship with personality scores for each species.

This research was only possible through the generous funding of JSPS, who provided funds for a two month visit to the laboratory of Professor Murayama in Kyoto, where I could learn and carry out the necessary genetic analyses. Prior to this I had already collected personality and behavioural data on the monkeys, so this visit allowed me to gain new research experience, and to strengthen collaborations with researchers at Kyoto University. In addition I was also able to attend and present my research at a conference during my stay, and to participate in a short documentary explaining and promoting research carried out through the institute. As a result of this short term fellowship I will continue to work with collaborators in Kyoto on this project, and hope to return to Japan for further collaborations after my PhD.

Tips for effective working methods in a Japanese research environment

In comparison to my home institute, I found my host department had a very strong work ethic with long work hours. Whilst this proved to be very productive, you have to be prepared to meet tight deadlines and get results fast. Whilst my colleagues all spoke English, miscommunications could be made work difficult, and I felt that learning more Japanese before hand would have benefited me massively, especially outside the work place where spoken English was some times limited.

Japan in general

Japan is an amazingly varied place and has so much worth seeing - find time to enjoy it. Vegetarian food does exist, you just have to look for it! Cultural expectations are quite different from the UK, especially in academia – take time to learn about this before hand and if in doubt, ask.



Photos: left – Poster Presentation at the Empathy Meeting in Nara; right – lab work at the Wildlife Research Center; below – view of Kyoto from Daimonjiyama.

