'Nihon e nano kenkyo ni kimashita ka?-Life in Japan for the JSPS

Postdoctoral Fellow

It's Golden Week, the entire country is on holiday, all the *Shinkansen* bullet trains are booked and hotel rooms/tent pitches are like gold dust. You find yourself in a crowded river valley in the hot and humid, almost subtropical, sun with hundreds of Japanese amateur fossil collectors looking for that very elusive shark's tooth (Fig 1). It is at this moment that you start a casual but ever so slightly formal conversation with a local, in a language that only 18 months ago was total mystery to you. Nevertheless, this is a conversation that you would have had many times and tends to start with the question "O-kuni wa dochira desu ka"- where are you from? and will always finish, in my case, with sega-takai desu ne! - gosh you are tall! Anyway at the end of a hard day in the sweltering sun you can look forward to Japanese bangohan - 'evening rice' followed by a nice relaxing hydrothermal onsen bath with your fellow fossil hunters and most of the local population 'oh natural' of course! All this, with the full support from your post-doctoral host, in the guise of cultural exchange, while being funded by a generous fellowship from the Japanese government. One of these fossil hunters was my fellow 'resident' alien and ultra-gaijin Simon Darroch who in the last issue of this Newsletter gave an account of his experiences as a graduate student in Japan. Partly on his suggestion, I thought it would be fitting to write this follow-up article on how to get a post doc position in Japan and how our experiences, although similar, are quite different to those of a graduate student. The hope is to assist those who are considering heading to the Far East for a truly unique placement.

Applying to the JSPS

For those are willing to work in Japan there are several options in applying for a fellowship, which depends if you want a short-term (from 1 to 12 months) or a long-term (up to two years). I have found that those applicants in the early stages of their career find that 6 months or even a year is not nearly long enough to appreciate fully all that Japan has to offer. These fellowships are provided by the Japan Society for the Promotion of Science (JSPS) in open competition across all sciences. The key task is to identify a host who is willing to look after you and take responsibility for all aspects of your application and tenure. This host should be in your area of speciality although in some cases they are willing to diversify, as it is often considered a great honour for them to receive an international guest even if they are staying for two years! It certainly helps if your host is international in outlook and can speak good English, as even some high-ranking academics maybe able to write excellent English; while being unable to speak a word.

Luckily, in my case, I had Dr Tatsuo Oji as my host at the Department of Earth and Planetary Sciences, University of Tokyo. Dr Oji not only spoke excellent English and was very friendly and wonderfully helpful, but also had lots of experience working abroad and had successfully hosted at least two previous international post-doctoral fellows. Dr Oji is also an established authority on post-Palaeozoic and recent crinoids and is a faculty member at Japan's most elite institution, the University of Tokyo. As a palaeontologist who had only previously worked on fossil crinoids from the Jurassic and Cretaceous, for me going to Tokyo was an excellent opportunity to work on the only living captive population of sea lilies in the world.

Although the Japanese often claim that their country is small, Japan is actually astonishingly diverse - from rainforests and mangroves of Okinawa and the Yaeyama-Shoto Islands in the south to the thick forests of Hokkaido in the north, rich in Cretaceous ammonites (Fig 2 Left).

For this reason there is a huge range of universities, and potential hosts with whom you can collaborate within the field of natural sciences alone_In addition the Japanese are still investing heavily in impressive local museums and institutes with a strong bias towards local geology. Which means you often come across people with vast reserves of palaeontological knowledge in the remotest locations.

In starting your application it is a good idea to subscribe to the free JSPS newsletter through their website (http://www.jsps.go.jp), this has all the further particulars of each program available with deadlines throughout the year.

Once you have found your host, either they can apply directly to the JSPS in Tokyo or via one of there regional offices worldwide such as JSPS London (http://www.jsps.org/). I personally applied for 24-month fellowship through Royal Society the (http://royalsociety.org/funding.asp?id=7068) who will then nominate you to the JSPS. The first route has to be done through the university or institute, as typically their admin have their own submission dates which can be weeks before the real deadline. If successful, the JSPS will pay your return flight from your city of residence to your host's closest airport. There is money provided for settling in to your life in Japan and you will be provided with health insurance and cover for other research-related activities. Before you leave, you will need to get a visa for cultural activities either as a 'researcher' or 'professor' and a 'certificate of eligibility' prepared by your host. Both can be obtained from the Japanese embassy in Piccadilly (http://www.uk.emb-japan.go.jp/en/visa/visa-certif.html). You do not need a work permit for a JSPS fellowship as your salary is actually a tax-free allowance and you will not be able to seek other employment during your tenure.

Apart from the standard reports and presentations, the only main limitation of a JSPS fellowship is restrictions on foreign travel. The total amount of time you are permitted to spend outside Japan is 30 days per year, (providing your tenure is for more than 4 months) this is primarily for attending conferences and to collect data. If this limit is exceeded, you will have to take a rather large pay-cut or risk losing the fellowship all together. Although this could deter people from going to Japan, in my experience most fellows enjoy living in East Asia so much that they do not want to leave, let alone be away for over a month. Although, it does make going to nearby China or South Korea for long periods a bit tricky.

Arriving in Japan, finding accommodation & everyday cost of living

When you arrive in Japan, the first thing you will have to do is to obtain your 'certificate of alien registration' from the city office. This will be your first experience of Japanese bureaucracy: city hall is full of hundreds of secretaries and admin staff, each one in charge of one very specific task...you just need the find the right one...and the right coloured form to fill in (there are over 30, colour-coded in racks like newspaper stands)... it's not that easy! As a consequence, it is essential that you have someone with a decent command of Japanese with you. Once you have received your gaijin card you then pick up more paperwork to open your bank account and obtain a mobile phone.

As Simon mentioned in his article, it is true that Japan, and Tokyo in particular, is one of the most expensive cities in the world. However you can eat like a king in Tokyo very cheaply, especially if you love Japanese food. Things become a lot simpler if, like me, you are addicted to ramen, a very fatty noodle soup draped with slices of roast pork which is about as healthy and easy to find as a hamburger and has enormous regional variety, and many weeks

can be spent happily finding your favourite one. As you would imagine in a tightly packed city the big expense in Japan is accommodation the options are to go into very cheap university accommodation (which is like going back into halls), or a shared 'guest' house, or try to get your own apartment. For university accommodation you will need to contact your host well in advance so that he can apply. Although communal 'guest' houses are an option, as a JSPS fellow your budget does allow for you to have your own apartment. I was extremely lucky to have a very nice apartment in a very traditional neighbourhood inside the *Yamanote* line (the green circle line of Tokyo). My *apparto* was small by UK standards, and the kitchen was like a ship's galley, but nevertheless it was not far from the university, and as luck would have it was sandwiched between a very lovely formal garden and a woman's university tennis court, making my flat very quiet indeed.

Finding an apartment in Japan can be complicated and expensive with archaic traditions like 'key money', which is best described as a non-returnable gift deposit. This, plus the agent's fee, the cleaning fee and the normal deposit could mean that you pay out over 1 million yen (approx. £6,900) just to move in. Luckily there are a few letting agents who specialise in finding apartments for foreigners and can help you through the paper work (http://www.kimiwillbe.com/ for example). It's good idea to recruit some graduate students from your office to help with your search, and they will gladly help, happy in the knowledge that you will be proof reading their papers for the next 2 years! I must add that most apartments are un-furnished so it is good to get furniture and appliances second hand.

Working and teaching at a Japanese University

As you would expect Japanese labs are enormously friendly and welcoming to all newcomers to their scientific community. Some elements of lab culture do take a bit of getting used to, such as students sleeping in their offices, reading hundreds of manga comics, or working 12hour days. It is rather easier to get used to the frequent beer parties that take place in your office (Fig 2 Right). Many labs prefer that their post-docs share an office with the graduate students, which has considerable advantages both for your integration and language skills, not to mention that it is the best way for you to gain experience in helping graduate students who need to prepare their papers and presentations in English. Like Simon, I found the Japanese graduate students very helpful and independent, the students are encouraged to work on their own subjects as their supervisors are often extremely busy. Despite this, rank and seniority are deeply rooted in Japanese culture and is never far from the surface. Foreign researchers are for the most part exempt from the incredibly formal rules and customs that govern exchanges between faculty, students and native post-docs. Although, you are not always exempt from the formality between you and your host (although your host will address you informally). You may find that your Japanese sensei has formed an opinion over many years of research and experience and may find it difficult to accept your new ideas or methods if these go against their own accepted wisdom. However, the whole point of a JSPS fellowship is to foster a productive relationship with your host regardless of these different opinions.

The lab tends to be organised into seminar groups which are headed by the professor. The labs have fantastic equipment that is freely available if it belongs to your seminar group so collaboration outside this unit is fraught with difficulties and politics. Of paramount importance is the student seminar meeting where attendance is mandatory (yes they do take a register). For the post-doc this should not pose a problem, however each student will repeat ad infinitum the same presentatation at bimonthly intervals, making only small and

incremental amendments until the final defence, when it is deemed to be perfect. Although more than a little repetitive, this is the way in which the *sensei* can keep track of all his graduate students. In Tokyo, the presentations were totally in Japanese and the slides were more like a Chinese character lesson than a scientific talk! The MSc or PhD students can be stopped at almost at any moment with a question or comment from the audience, and protocol dictates that the student refrain from defending the material, and instead receive remarks very politely and incorporate the feedback into the next presentation. Such a seminar can go for a very long time; my record at the University of Tokyo was nearly four hours!

Language and culture

Unlike graduate students, it is not essential for post-docs to learn Japanese to near fluency especially if you work in the big cities. Most post-docs are simply too busy to find the time to learn Japanese. However if you really want to enjoy life in Japan to the full then it best to dive in as soon as possible into lessons, especially if you intend to stay more than a year. A good level in Japanese is especially valuable if you travel or intend to live outside the major cities and for those outside Tokyo, Osaka and Kyoto the JSPS does provide paid one-to-one tuition. The big universities have an extensive network of Japanese classes at all levels that are of a very high quality and moreover are free! These will ease you into learning the logical grammar system and introduce you to other researchers and students with the help of extremely friendly, professional, almost mother-like, teachers.

Funding and other opportunities

JSPS fellows have so many other opportunities open to them in Japan. Not only is there an enormous range of cultural and travel opportunities open to you and the almost compulsory all night *karaoke* evenings, but JSPS fellows are provided with generous research grants that you and your host may use for fieldwork (and lab equipment). For micropalaeontologists, or those working on living animals, there is the opportunity to work for JAMSTEC (Japan Agency for Marine-Earth Science and Technology:- http://www.jamstec.go.jp/e/) and join a research cruise. While in Japan, you could also join the Paleontological Society of Japan http://wwwsoc.nii.ac.jp/psj5/E_index.html and go to their very well attended meetings, In which I can guarantee that you will be the only non-Japanese person there. Fellows are especially encouraged to join the science dialogue program (http://www.jsps.go.jp/english/e-plaza/e-sdialogue/index.html) which allows JSPS fellows to give a lecture and practical to high school students and is a truly unforgettable experience (Fig 3).

In Summary

Like Simon, I believe being given the opportunity to carry out research and supervision at the University of Tokyo was a real privilege. Japan is a place apart, almost a crime-free utopia with clean streets and very courteous people. I could easily write a lot more about the temples shrines and castles and many festivals that are to be experienced (Fig 4), but I will let you discover those for yourself. Post doctoral studies in Japan are an invaluable experience and really open your mind to a completely different way of thinking. JSPS funding is extremely difficult to obtain for Japanese graduates with six students going for just one fellowship in my seminar group last year. Thus, foreign researchers are extremely lucky that such fellowships are available to them and I encourage possible applicants to take advantage of this opportunity to foster links with Japanese research groups.

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Figure/Photo Captions

Figure 1





Fossil hunting in Mizunami, Central Japan: (Left) Simon and I pointing to something very interesting ...honest! (Middle) Japanese amateur collectors hard at work. (Right) Looking for that sharks tooth.

Figure 2





Japanese style field work in the forest: (Left) looking for ammonites in Hokkaido bear country, hence the bear protection suit and bells! (Right) Japanese lunch box in the field with our students and the *sensei*.

Figure 3



Student looking for Cretaceous ammonites during palaeontology practical: Gifu Prefectural high school Gizan, Central Japan.

Figure 4



(Left) The famous *Kinkaku-ji*-Golden Pavilion temple Kyoto (Right) Friends visiting the *Kiyomizu* temple Gion, Kyoto.