JAMES RENNIE BEQUEST

REPORT ON EXPEDITION/PROJECT/CONFERENCE

Expedition/Project/Conference Title: 1) Evolution of Ecology and Infectious Disease conference and workshop. 2) Co-infection meeting.....

Travel Dates: 16/5/09 – 31/5/09.....

Location: University of Georgia, Athens and Memphis, Tennessee.....

Group Member(s): Karen Fairlie-Clarke.....

Aims: To gain experience in programming for the statistical package 'R'
To present a poster " Why do Antibodies induced by malaria and helminths cross-react"
To give a talk presenting my current PhD research to colleagues in the co-infection field.
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OUTCOME (not less than 300 words):-
The Ecology and Evolution of Infectious Diseases (EEID) is an annual conference held in the United States and I am grateful that the James Rennie Bequest was able to award funds to facilitate my attendance this year. The theme "Infectious Disease Dynamics in Multi-host Multi-pathogen Communities" was of particular relevance to my PhD research and it was an excellent opportunity to meet like-minded people from a variety of disciplines. The organisers of this meeting work hard to maintain a friendly, informal atmosphere, with the emphasis on discussion. So as well as the 23 talks the program included synthesis sessions led by young post-docs who summarised general themes and posed questions to be addressed. The friendly nature of this conference often saw the discussions spill over to the more convivial setting of the local bars and restaurants. The conference concludes with a poster session, mine was one of 50 posters on display and I spent the whole 2 hours discussing my current and future research with some of the most highly esteemed scientists in the filed. My poster design encapsulated both the immunological aspect of my research and how I feel this relates to evolutionary and ecological theory. I was really pleased with how well my ideas were received and had a particularly interesting discussion with Professor Derek Smith who has developed techniques to map the antigenic relatedness of different influenza strains, a technique I had thought of applying to my data. Derek Smith was also very keen for me to keep in touch regarding my work and future opportunities to work with him as a post-doc. As Derek Smith is based in Cambridge I think he will be a very helpful contact with whom to discuss my research and was extremely pleased to have the opportunity to introduce myself at this meeting.
The morning after the conference concludes there is an organised hike which is a really important part of the meeting; a major aim of the EEID organisers is to give students and post-docs an opportunity to build relations that will help form the future research community and this trip gives a real cohesion to the group of participants. All the participants are invited out for dinner that evening which incorporates a feedback session so that the organisers of next year's meeting can hear everyone's views and suggestions. This gives a real sense of ownership to the participants and I think really contributes to the success of future EEID meetings.

In conjunction with the EEID conference Colorado State University runs a workshop "Modelling and Data Analysis: Evolutionary Biology of Infectious Diseases" aimed at introducing PhD

students and early postdocs to the rather daunting (in my case) world of computer programming. This intensive four-day workshop runs from 8.30am to 6pm and days are filled with interactive computer based exercises supported by tutorials given by the team of highly experienced academics. It's a very steep learning curve for the programming novice such as me but it is remarkable how much confidence you gain in such a short time. The workshop is particularly effective because it involves working in small groups on datasets provided by the participants, which gives a real sense of how the tools can be used in our own research. The thought of spending long days in a computer lab may not sound like much fun but there is such a strong camaraderie in the group that the days fly by with plenty of laughs along the way. The workshop concludes with presentations from each project group and is a really great way to find out people's research interests. Of course it's not all work, work, work - drinks and dinner at the end of each day were great social occasions and I've made many friends that I hope to stay in touch with. It is always great to have peers to discuss your ideas with and the folk at the EEID workshop are incredibly diverse so the insights they have to offer are particularly valuable.

After the EEID workshop and conference I travelled to Memphis, Tennessee for a Co-infection meeting at St. Jude Children's research hospital. This small meeting was dedicated to research in co-infection and was a unique opportunity for me to present my research in this field. I gave a short talk and was very pleased with how well it went, I hadn't spoken at an international meeting before and it was very good experience. The advantage of giving a talk, nerve-racking as it may be, is that everyone then knows what your research is about and they actively seek you out. I spoke just before the first coffee break, which was ideal as it gave me the chance to continue discussing some of the points that had been raised in a more informal environment. In contrast to the EEID meeting this audience was more biomedical and this gave me the opportunity to discuss my research in a different light. I think it is very important to be able to present your work in different ways to people from different fields of research and the two meetings that I attended have provided me with valuable experience in doing that.