

**BVA OVERSEAS TRAVEL GRANT PROJECT 2008
OLIVIA AVDIS - TANZANIA**

**Welfare and health assessment of Tanzanian dogs and its
relationship to their immunological response to rabies vaccination.**

In the summer of 2008 I was given the opportunity to be involved in a short research project on the welfare and health assessment of Tanzanian dogs and its relationship to their immunological response to rabies vaccination thanks to funding I received from the BVA and the Wellcome Trust.

It is estimated that 55,000 people die annually of rabies in Asia and Africa with about 95% of these cases being caused by rabid dog bites. Tragically about 60-70% of these cases affect children under the age of 16. Once the clinical onset of rabies is apparent, no cure is available, and, with very rare exceptions, death is inevitable. The disease results in horrific clinical signs and any human case causes considerable trauma for all concerned. Furthermore, rabies results in significant livestock losses, which can have important economic consequences. Rabies also poses an extinction threat to several endangered wildlife populations, including the Ethiopian wolf (*Canis simensis*) and some populations of African wild dogs (*Lycaon pictus*) (ARC, 2008).

Although dog rabies vaccination has the potential to substantially reduce human and wildlife disease risk, questions remain about the effectiveness of rabies vaccines in animals in poor condition and this is of particular concern in developing countries where domestic dogs, which

are the reservoir for this disease, are believed to be in relatively poor state of health and welfare.

I arrived in Tanzania for my first visit to east Africa (or anywhere in Africa for that matter) trying to have no expectations and being ready for anything. I was to spend some time in and around the Serengeti with the carnivore research project team, who have been leading the rabies vaccination campaign in Tanzania for the past 5 years.

The trip from Nairobi, where I landed, to the Serengeti involved many kilometres on bumpy dirt-tracks and a flight in a very small plane with multiple landings and take-offs on equally bumpy dirt-runways surrounded by giraffes, various antelope, primates and any other wildlife the Serengeti had to offer.

On arrival to Seronera (the Serengeti headquarters) I was met by Iddi (the team's leading vet). He took me to the offices where I was to meet the people I was to be working and living with during my stay.

Once I was briefed and settled in we got to work. Top tip: never leave any windows or doors open in any unattended car or building – the baboons will invade and take over...

There were to be a few days before going out to the villages to sample all the dogs and it just happened that for

those few days the wildlife vets from the Tanzania Wildlife Research Institute were running a course on wildlife capture for the Tanzanian vet students. Would I like to join? What a silly question...

Photo 1

So off we went learning about and capturing the Serengeti wildlife. To be honest you don't need to go looking for wildlife in the Serengeti – the animals are absolutely everywhere. You can sit on the porch having breakfast while zebra casually walk past and the baboons sit in the corner eyeing up your toast. Throughout the wildlife course, the students and professors from Morogoro vet school really made me feel a part of their group. It was a fantastic experience, they were all great company and we were able to share experiences about being a vet student in different parts of the world.

The course came to an end and it was time to go out to the villages and work with the dogs. I have to say that this was probably my favourite part of the trip. Seeing what life is like in rural Tanzania and working with the vaccination team. The teams will set up in the centre of the village and people will come to have their dogs vaccinated. The impact this rabies vaccination campaign has had on the lives of the local people is evident. Over the past five years the incidence of human rabies has been hugely reduced and the people are extremely grateful for the work that is being done.

Photo 2

When we were not busy I played with the kids. I loved them. They were so happy and excitable and they

absolutely LOVED the camera. Evenings were spent at the guest-house spinning down dog bloods and organising test tubes before going out for dinner.

Photo 3

The sampling week came to an end and we headed back to Seronera. Tiziana, who had been my host during my stay in the national park invited me to go with her to the vet school in Morogoro to process some bovine samples for her TB project. It is a two-day trip by road over highland grass planes, around crater rims, through mountainous jungle and rolling hilly agricultural land. Tanzania is truly beautiful.

We spent our time over the next few days between the lab and the town, visiting markets and restaurants and walking around. At the end of the week it was time for me to start the long journey home. Three days of bumpy roads in speeding busses, and a couple of flights later I was back in Scotland again.

I'd had an unforgettable experience, met interesting and inspiring people, saw a beautiful country, got up close with African wildlife, and worked with a team that has improved the lives of thousands with their work.

I would like to thank BVA and The Wellcome Trust for funding me, my supervisor Sarah Cleaveland, Suzanne McNabb for including me on her project, Tiziana and Grant for giving me a place to stay and taking such good care of me, everyone on the Carnivore Disease Project, the people from the Frankfurt Zoological Society and of course my family for always supporting me in everything I do.

