Msc in Tropical Animal Health kicks-off in South Africa

Our Head of Communications Roeland Scholtalbers attended the induction week of the Master of Science in Tropical Animal Health (MSTAH), which has a keen eye for people and the environment.

20-02-17, 09:20 - Roeland Scholtalbers

“Growing up in the proximity of the Kruger park, I have always been aware of the close relationship people have with their surrounding environment, domestic and wild animals. This relationship also impacts the transmission of disease,” says Jacques van Rooyen as we have
That sums up pretty well what ‘One Health’ is all about, the main area of research and teaching for Jacques van Rooyen at the Faculty of Veterinary Science, University of Pretoria. It is also a key concept in the collaborative Master of Science programme his university runs with the Institute of Tropical Medicine in Antwerp. Inside the auditorium a group of twenty (mainly) veterinary scientists from across Africa and one participant from Europe, Latin America and Asia each, are following a lecture on bovine tuberculosis.

February 2017 marks the start of the second edition of a unique collaborative degree between the South African and Belgian institutions, which starts with a face-to-face introduction week in Pretoria and the Greater Kruger National Park. Afterwards, the students follow online courses. Most of them do so alongside their daily job. Two weeks of individual skills training in either Antwerp or Pretoria are also foreseen in the two-year programme.

I am privileged to observe part of the introduction programme, having travelled to South Africa for a documentary project about evolutions in tropical medicine and international health due to phenomena like global trade, migration, tourism, climate change and changes in land use.

The latter is of particular relevance in the North-Eastern part of South Africa where the Kruger National park is located. Jacques van Rooyen explained why as we drove northbound from Pretoria on an early Saturday morning. “In recent decades the population in the surroundings of the wild parks has significantly increased. Wildlife is more and more constraint in small pockets close to where communities and their domestic animals and livestock live. This also means more opportunities for diseases to spread from wild animals to pets and cattle, and in some cases to humans.” With the arrival of more people and their animals, so did rabies, which previously was confined to the KwaZulu Natal province. Leptospirosis, carried asymptomatically by rodents, is a zoonotic disease that also benefited from the increased human population and their impact on the natural environment.

During their time at the Hans Hoheisen Wildlife Research Station the students are confronted with different dimensions that need to be taken into account at the interface between humans, animals and the environment. The group visits among others a wildlife rehabilitation centre, a veterinary and a human health clinic, as well as a traditional healer. Whilst the healer’s views on western evidence-based medicine raises many eyebrows, it also provides plenty of food for thought and discussion.

That is the whole idea of this introduction. “The interface of humans, animals and the environment varies between settings and countries. But the main principles stay the same wherever you are,” Jacques van Rooyen tells me. Through the introduction and throughout the course, the idea is to inspire students to take the complexity of health issues into account as they advance in their careers.

After dinner, with the electric fence that separates us humans from the wild animals ticking reassuringly, Zimbabwean student Godfrey Nyoni shares his impressions so far. “This course is interesting, challenging and fun, as we are immersed in the particularities of a South African setting. For example, we heard today about traditional healing goes against my scientific mind, but I know for a fact that many people seek help in traditional medicine. It is just one of several dimensions of a complex system we need to be aware of.”

Lecturing staff from Pretoria and Antwerp confirm that the main strength of this degree is the complementary strength of the two collaborating institutions. According to Prof. Pierre Dorny, one of the several ITM colleagues on site, research is one example: “The University of Pretoria is well versed in research on veterinary viruses, whilst ITM has a lot of expertise concerning parasites.” Jacques van Rooyen adds there is also a geographical component: “In poor countries overgrazing is a (one) health issue, but it is not necessarily in Europe. Here in communal South Africa abattoirs are mainly informal, while they are formal in Europe. For the students it is enriching to get the best knowledge of two leading institutions rooted in Africa and in Europe.”