

Animal Science

NEWSLETTER

Autumn 2009

Thumbs up for IBERS in the Research Assessment Exercise



Every few years, all of the university departments in the UK are assessed according to the originality, significance and rigour of the scientific research they conduct. In the most recent exercise, 10 % of the research in IBERS was judged to be the very best in the world, 35% as internationally excellent, 50% as internationally recognised and 5% as nationally recognised. None of the research fell below this standard. This superb result put IBERS as the highest ranking department in Wales in the Veterinary Science, Agriculture and Food Science unit of assessment, and 6th best in this unit in the UK as a whole.

Animal Science Student of the Year

Heartfelt congratulations to Louise Cubbage, who was the best final year Animal Science student in IBERS in 2009. Congratulations also to Sam Pearson who has made it to the final of the Royal Association of British Dairy Farmers Student of the Year Competition. Sam will find out if he has won the competition later this year.

Crufts



As part of their studies, students on the companion animal pathway of the Animal Science scheme went to Crufts this year on a two fold mission. As part of an assignment, they went to investigate recent changes in the breeding aims of the various dog breed societies in the light of alleged poor welfare in the press and elsewhere. Secondly, while students were at the show they were asked to collect some of the free feed samples that are usually on offer. These were later analysed in a laboratory practical.

Animal Science degree helping Eleanor become vet

Eleanor Chruscikowska graduated in 2006 in Animal Science. She used this qualification to gain entry into the second year of the Veterinary Science degree at Edinburgh University, where she has just successfully completed the fourth year of the course. She recently wrote to us to give us an update on how she is doing and how much she is enjoying the course there. She went on, "I really would have struggled with the Veterinary Science course if it wasn't for doing the Animal Science degree at Aber beforehand. I'm in a large year with about 60 other 'graduate entry students' as well as the www.aber.ac.uk/en/ibers

IBERS ABERYSTWYTH Institute of Biological, Environmental and Rural Sciences

List of Courses

Animal Science Animal Behaviour Agriculture with Animal Science Equine and Human Sports Science Equine Science Marine and Freshwater Biology Zoology Zoology and Microbiology

Interested? Phone Fay Hollick on 01970 624471 Email: ffh@aber.ac.uk



Eleanor Chruscikowska, seen here checking out the mouth of a cow.

normal intake of school leavers. Most of the other graduates have done Animal Science, Zoology or Biology degrees, but none had covered as much as we covered at Aber so I feel at a massive advantage - particularly with the large-animal knowledge I now have, as well as the immunology and parasitology we did. Also, with regards to understanding how research is done, this is just not taught in the Veterinary course, but is so important to be able to critically review journal papers and get on in the course. Anyway, I just wanted to say thanks, and to let you know that I really love it here!" Eleanor hopes to complete her Veterinary Science studies next year and then to enter general veterinary practice.



Kangaroo methane

It has been proposed that kangaroos produce less methane than ruminants. In the context of Australian meat production, this may make the kangaroo a more ecologically friendly food source than the existing ruminant populations farmed there. In both ruminants and kangaroos, the breakdown of ingested plants is carried out by microbes in the digestive tract. While there is already extensive information about the types of microbes present in the ruminant, there is relatively little information available about the microbes in the digestive tract of the kangaroo.

As part of an Animal Science undergraduate dissertation project carried out in collaboration with scientists at the University of Western Australia, research is being conducted in IBERS into comparing the bacterial population of the kangaroo's gut with those found in the rumen of sheep and cattle. The objective of this work is to determine if the bacteria carrying out these roles in the two different types of digestive tract are similar or if the two species have unique gut bacterial populations.

A whizz at making cows spending less than a penny

In the last six months, IBERS Animal Scientists at have been successful in winning over a million pounds worth of grants for new research projects.

One of these will investigate the feeding of dairy cows in order to limit the amount of nitrogen that they excrete in their urine. The project will run over the next 5 years and its aim is to find ways of feeding protein to dairy cows more efficiently and therefore to prevent nitrogen loss from the animal. If protein is fed to dairy cows wrongly the nitrogen it contains is excreted in the urine. This is both an expensive waste and a serious pollutant of water courses.



Beth determined to ensure that children learn about farms and farm animals



Beth Harrison; graduate in Agriculture with Animal Science

Beth Harrison graduated in 2008 with a first class honours degree in Agriculture with Animal Science. She was brought up in Sheffield, a rather unlikely background for an animal agriculture student. At last summer's Royal Welsh Show Beth was presented with the Dr Richard Phillips Agricultural Student Award for the best student of a land based subject at a Welsh University. She is currently undertaking a year's apprenticeship with Rural Ministries in Essex.

She says, "I'm not from a farming background; I grew up in a city and there are no farmers in my family. I became interested in farming when I was at secondary school, and ignoring the advice given to me by the careers advisors, I decided to study Agriculture with Animal Science at University at Aberystwyth. Despite my lack of farming experience, Aber was willing to give me a place, and it was a real privilege to gain my degree under the teaching of the staff there.

"It is incredible to think that there were so many fundamental things about agriculture that I wasn't aware of simply because I'd never been exposed to them. I think that it is so important that children that are growing up in cities and towns, and are not exposed to farming in the course of their everyday lives, should be given opportunities to learn about agriculture.

"Now that I have gained my degree I want to use it in some way that will enable me to be a part of the process of ensuring that the current generation of children are growing up aware of the agricultural industry, and how their food is produced. I'm grateful of the opportunity I had to learn and experience farming relatively late in my education. I want to be able to pass this on to children so that they can grow to love agriculture at an earlier age than I did".