

# Newsletter 2018

**IBERS** Institute of Biological,  
 Environmental and Rural Sciences



*Animal Science*

## List of Courses

### MSc

Animal Science  
 Equine Science  
 Livestock Science

### BSc

Animal Science  
 Agriculture with Animal Science  
 Equine Science  
 Equine & Veterinary Biosciences  
 Veterinary Biosciences

**Interested?** Phone **Iain Chalmers** on  
**01970 628505** or Email: **iwc@aber.ac.uk**



## *Equine Parasite Research at London Vet Shows*

Dr Russ Morphew was invited to attend the London Vet Show in November 2017 to discuss his research into novel diagnostics for equine worms. The research, co-funded by Techion Group Ltd, has developed and validated the use of the FECPAKG2 for faecal egg counting in equids and thus provides a novel diagnostic tool for the equid sector. Improving on yard diagnostics of worm burdens in horses is crucial to provide horse owners and vets the tools to manage worm infections to a greater effect. The presented work, well received by the attending vets, demonstrated the initial success of the project bringing the FECPAKG2 equine platform to the sector and explained the next steps for the research going forward. This event followed on from a successful summer trial at the Royal Welsh Agricultural show where the PhD student on the project, Fiona Tyson (a graduate of BSc Equine Science at Aberystwyth) demonstrated the equipment on site at the show with the results recently published in Vet Record.



## *New £4.2m Veterinary Facility at Aberystwyth*

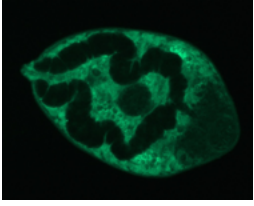
Through Vet Hub 1 researchers will work with industry to develop tests and vaccines that will help reduce losses in the livestock industry and improve animal health. The researchers will be particularly focussed on developing solutions for animal-borne diseases that could pass to humans. Vice-Chancellor of Aberystwyth University, Professor Elizabeth Treasure, said: "The facility also heralds another step forward in the development of Aberystwyth as a centre for veterinary expertise. Our discussions with the Royal Veterinary College (RVC) are progressing on proposals to offer a joint programme whereby veterinary science students at Aberystwyth can spend some of their time studying at the RVC and students from the RVC can come here to undertake aspects of their training, particularly large animal practice."



Cabinet Secretary for Environment and Rural Affairs, Lesley Griffiths AM (centre) at the launch of the new £4.2m state-of-the-art veterinary hub. Also pictured are (left to right) Professor Jamie Newbold, Professor of Animal Sciences at IBERS; Sir Emyr Jones Parry, Chancellor of Aberystwyth University; Professor Elizabeth Treasure, Vice-Chancellor of Aberystwyth University; and Professor Mike Gooding, Director of IBERS.



## New Masters Course in Parasite Control Launched



A new research Masters training programme will launch in IBERS in September 2018, offering post-graduate training in Parasite Control.

Bringing together staff researching human and veterinary parasites, this MRes degree led by Prof. Hoffmann is set to train students on interdisciplinary methods to control some of the deadliest infectious organisms on the planet. Students can train in areas relating to the parasite research within IBERS such as drug discovery, ecology, genetics/epigenetics and vector biology. These students will then be able to progress to post-graduate PhD, commercial or industrial research opportunities depending on their interests. The new MRes Parasite Control degree joins the other Masters degrees provided by IBERS such as MSc Animal Science, Livestock Science and Equine Science degrees to offer a great range of advanced training.

## Animal Science Graduate Lands Job with BBC Wildlife

Our Animal Science graduates go on to a range of careers in the veterinary sector, but Megan Shersby has used her degree to move into science



communication with the high-profile BBC Wildlife magazine and website. Having graduated from Aberystwyth in 2013, Megan worked for the Wildlife Trust charity before

becoming an editorial assistant at the BBC in 2016. Megan manages the website, social media, and is involved in creating the BBC Wildlife magazine.

## Success for Animal Science Students at National Competition

Essays from our Animal Science undergraduates have been praised by the Royal Association of British Dairy Farmers (RABDF) in their competition for essays on disease control. Last year, Louise Swanston (pictured) was one of four undergraduate students selected in the nationwide competition, and Aberystwyth continued its success by having another finalist in this year's competition. Animal Science 3rd year student Francesca Mansfield will attend the Dairy-Tech awards event, along with her fellow finalists. Course organiser Dr Iain Chalmers said of the finalists: "We are proud that Aberystwyth is training students to produce work that is recognised by the industry on topics critical to animal health such as biosecurity, antimicrobial resistance and the importance of farm health planning".



## Cow Behaviours Measured for Dissertations

Five final year students of Agriculture and Veterinary Biosciences have been busy collecting behavioural data from cows at Aberystwyth University's dairy farm at Trawsgoed. Using accelerometers attached to the legs of cows, Sarah Littlewood, Bronwen Watkins and Callum Munro have been measuring the impact of various degrees of hock, knee and neck lesions, as well as gait abnormalities, on the amount of lying and standing undertaken by a sample of 100 cows at the farm. Using these devices the students aim to find out more about the behaviour of cows and to relate this to welfare and performance. Their supervisor Manod Williams said, "With access to accelerometry data 24hrs a day we can now make better decisions as to the needs of cows. For example, if moderate hock lesions are significantly impacting the amount of time cows spend lying down then there are practical measures that we can take to solve the problem." Meanwhile, using only measures of facial expression of cows to detect pain, John Rees and Dafydd Owen have been carefully examining changes in the facial attributes of cows due to lameness and mastitis at Trawsgoed. Manod said, "This information may prove to be a useful tool for farmers for detecting pain earlier as cows are well known for hiding other signs such as changes in gait."



## Top Marks for IBERS for Student Satisfaction



Once again, the 2017 graduates of IBERS demonstrated that they were overwhelmingly happy with their courses, with 91% saying that they were either satisfied or very satisfied overall

in the National Student Survey. This very high level of satisfaction included students in the Animal Science subject area (which also covers the subjects of Equine Science and Veterinary Biosciences). Animal Science

students ranked their Aberystwyth University course as among the very best in the UK for 'The Teaching on My Course', 'Learning Opportunities', 'Assessment and Feedback', 'Organisation and Management, and 'Staff Value Students' Views and Opinions About Their Course'. This excellent performance was also repeated in the Destinations of Leavers of Higher Education survey of 2016 IBERS graduates, 97% of whom were in employment or further education when surveyed, and 71% in graduate level occupations. These results contributed to the

naming of Aberystwyth University as the 2018 University of the Year for Teaching Quality by the Times and Sunday Times. Speaking about these developments, the Director of Learning and teaching for IBERS, Dr Michael Rose, said, "We are delighted that the hard work we put into our teaching has been recognised once again by our students. The NSS and Employability data together demonstrate that IBERS gives its students the education and opportunities they expect from a University as well as preparing them for the workplace once they leave."



For the latest news from Aber in these subject areas follow us on twitter @IBERSbio