



PO Box 3 Penicuik, Midlothian EH26 0RZ  
United Kingdom Tel + 44 (0) 131 650 8784  
Fax + 44 (0) 131 650 8784

Email: [bsas@sac.ac.uk](mailto:bsas@sac.ac.uk) Website: [www.bsas.org.uk](http://www.bsas.org.uk)

VAT No 268 6594 03  
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## Completion Report for BSAS Scholarships and other awards

### Murray Black Award

Adam Clark, PhD student at Newcastle University  
[a.clark@newcastle.ac.uk](mailto:a.clark@newcastle.ac.uk)

### Additional funding secured

EAAP Scholarship, reimbursement up to 800 euros

### Start and end dates of undertaking the funded activity:

26.8.17 – 31.8.17

## The molecular basis of humpy-back disease in pigs

### What was done?

The award was used to fund a research trip to the 68<sup>th</sup> annual meeting of the European federation of animal science (EAAP) in Tallinn, Estonia. I flew from Newcastle to Tallinn on 26.08.17 and was based at the Solo Sokos Viru hotel for the duration of my stay. The following day I attended a workshop associated with the conference on writing and presenting scientific papers; which involved critical analysis of the approaches and techniques used in preparation of papers and posters, and also incorporated group exercises. On 30.08.17 I gave an oral presentation, in a session dedicated to health challenges for modern farming and emerging animal diseases, of the results of our molecular investigations into idiopathic lumbar kyphosis, a disease that has arisen in pig herds of which the cause is still unknown.

### Benefits of the Award:

#### 1. Are there any significant outcomes / follow up activities as a result of the activity you undertook?

The primary outcome of the conference was the opportunity to discuss my results with other experts in the fields of animal health. I was able to engage in discussions with individuals representing industry who had no prior knowledge of kyphosis, and thus the conference allowed awareness of kyphosis to be circulated among the community.

## **2. How have you personally benefitted from the award?**

I benefitted from the award in three main areas: scientific writing, improving my oral communication skills, and networking within a multi-disciplinary environment. I was required to attend a workshop which was based on the critical aspects of scientific writing and I learned many important skills which will help me in my career. This opportunity presented itself at an ideal opportunity, as I am approaching the end of my PhD journey, and such skills will be transferable. Presenting my work to a multi-disciplinary audience has improved my overall confidence in my ability to communicate, and has reaffirmed where my strongest skills lie as a scientist and a researcher. It was also fascinating to engage with individuals from different areas of expertise to mine, and observe how they approach the fields of animal health from a different perspective to mine. Ultimately this has led me to discussing my work with other experts and engage in networking.

## **3. Benefit of the award to the animal science community, academic and industrial:**

The award has allowed the research to be exposed to wide audience from multidisciplinary backgrounds across the academic and industrial sectors. Not only has this allowed for a greater exposure of kyphosis to a large audience, but has also illustrated the molecular mechanisms potentially associated with the disease. Understanding the basis of kyphosis will require attention and input from academic and industrial partners, and efforts from both of these communities will be necessary in the development of intervention strategies aimed at eradicating the disease. The basis of this research will contribute to the design of such strategies, the outcome of which will improve efficiency within the pork producing industry. The research has also observed novel molecular mechanisms associated with kyphosis and therefore skeletal disease. These observations will add an additional layer of knowledge to the complex and diverse fields of animal health and bone biology, and will surely lead to the development of new research questions aimed at providing an up to date picture of skeletal health and development.