Completion Report for BSAS Scholarships

Name and affiliation: Smaragda Tsairidou

The Roslin Institute and R(D)SVS, University of Edinburgh, Midlothian, United Kingdom

Award Name and value of the award: Alan Robertson (£750)

Was any additional funding secured to support the activity? Yes
R(D)SVS Birrell-Gray Travelling Scholarship (£500)

Start/end date of the award: 17 – 22 August 2014

Summary of the award (Briefly describe the objectives and how was it undertaken):
(approximately 300 words)

This award allowed me to participate in the 10th World Congress on Genetics Applied to Livestock Production (WCGALP), in Vancouver, Canada. There, I presented my results from a meta-analysis on resistance to bovine tuberculosis, in dairy cattle. During the 6 days event (17th – 22nd August 2014), I had the opportunity to attend a number of fascinating talks, by speakers from outstanding universities all over the world. This conference covered a wide range of topics associated with animal breeding in farm animal species. Specifically, the scientific program comprised several different sessions focusing on genomic selection for disease resistance and analysis of disease phenotypes, management of animal genetic resources, new approaches in bioinformatics and statistical methods, and linking animal breeding with economics. Furthermore, the subject of reducing the environmental impact was addressed and the conference program encompassed a workshop organized by the Animal Selection, Genetics and Genomics Network (ASGGN) on greenhouse gas emissions related research and adaptation to climate change.

This award enabled me to present my research and share my results with the scientific community. My results may add insight into the design of genomic prediction approaches for complex traits through the study of the case of bovine Tuberculosis. Interacting with other scientists working on genetics and receiving valuable feedback has allowed me to use the knowledge gained from this conference and develop new ideas in order to improve and expand the perspectives of my PhD research project.

Benefits of the Award:

This is the main part of the report and the two sections below should be approximately 1000 words in total. You may focus on benefits to yourself, to the animal science community, or both – depending on the nature of the activity undertaken.

Benefit of the award to you (e.g. new knowledge or skills, new contacts and collaborations):

This award enabled me to present my results from my research on the genetics of resistance to bovine tuberculosis, in dairy cattle, to the 10th World Congress on Genetics Applied to Livestock Production (WCGALP), in Vancouver, Canada. Attending the conference and the wide range of topics covered by the talks encompassed in the scientific program expanded my knowledge of genomic prediction approaches and animal breeding. I was exposed to the latest genetics research, and to the advances in analyzing techniques which I can use to complement and improve my PhD study. Furthermore, attending this meeting provided me with the experience of presenting to an international conference. This conference allowed me to communicate my science and this was particularly valuable as it gave me the opportunity to expose new audiences to the problem of bovine Tuberculosis, which remains a major challenge for the UK, and to the means by which genomic prediction could offer a complementary strategy for the control of bTB in cattle. Furthermore, the conference allowed me to meet other scientists working on genetics and animal breeding, and get to know researchers from other institutions all over the world. It also provided valuable new contacts beneficial to my PhD research and future career through potential new collaborations. Receiving feedback and exchanging scientific opinions has allowed me to use the knowledge gained from this conference and develop new ideas in order to expand the perspectives of my PhD research project.

Benefit of the award to the animal science community, academic and industrial:

Presenting at such a prestigious conference provided me with a chance to reinforce my institution's active role in genetics research, and potentially lead to a publication on the topic of bovine tuberculosis resistance. Disseminating findings and explaining the potential of the genetics based approach and the application of genomic selection for resistance to bovine Tuberculosis could be important to help inform policy makers, at a time when this disease is being widely discussed in scientific and agricultural communities. This conference was an excellent opportunity for interactions with representatives from industry, promoting dissemination of ideas between the scientific community and industry; facilitating collaborations in the process.

Other supporting information:

Conference scientific program is accessible here:
http://www.wcgalp.com/docs/default-source/default-document-library/2014_wcgalp_web8-5.pdf?sfvrsn=0