

Re: Report on the 2nd Large Animal Genetic Engineering meeting

The 2nd Large Animal Genetic Engineering Summit took place at the Canyons Resort in the Wasatch Mountains of Park City, Utah from June 3 to 6, 2018. It was a successful conference with a strong scientific program and broad participation from academia, industry and governmental agencies. Nearly 100 people representing North and South America, Europe and Asia participated in our summit. There were 30 excellent presentations covering gene editing technology development, human disease model development, therapeutic protein production in GE livestock, and applications of the technology in agricultural and biomedical fields. Regulatory section was also conducted at the summit led by the Center of Veterinary Medicine, FDA. There were speakers from France, Germany, Denmark, Netherlands, UK, China, Canada and USA. We promoted participation of junior investigators, post-doctoral trainees and graduate students in this meeting by reducing the cost of meeting registration fees for trainees. We also provided travel support for 4 graduate students (selected based on their abstracts) whose research uses GE of domestic animals for development of biomedical or agricultural models. To encourage participation of trainees and give their work maximum exposure, four trainees were selected for oral presentations during selected plenary sessions. Additionally, flash talk presentations were also organized for poster presenters. The meeting information and the program were posted at the LAGE Summit webpage <<http://LAGE.usu.edu/>>. The conference proceedings document was distributed to participants and made available to the broader scientific community.

The remarkable development of genome editing in the last several years is set to revolutionize the field, since for the first-time large animal genomes can be modified with precision and efficiency previously only achievable in the mouse system. This technology will allow for improvement in livestock production traits, animal health and welfare, and generation of more refined large animal models for biomedical research. This is a very exciting time in our field of research.

Submitted by:

Irina Polejaeva, on behalf of the organizing Committee

Irina Polejaeva, Utah State University (Chair)

Chris Davies, Utah State University

Jon Oatley, Washington State University

Bruce Whitelaw, Roslin Institute, University of Edinburgh

Irina Polejaeva, Ph.D.

USTAR Professor,

Department of Animal, Dairy and Veterinary Sciences

Utah State University

<http://LAGE.usu.edu/>