

2nd Large Animal Genetic Engineering (LAGE) Summit

PRELIMINARY CONFERENCE PROGRAM

Sunday, June 3, 2018

2:00 - 6:30 pm Registration

6:00 – 8:00 p.m. Opening Reception

Monday, June 4, 2018

7:00 am – 6:00 pm Registration

SESSION 1: Technology Development

Session Moderator: Kenneth White

8:00 - 8:15 am Kenneth White, Utah State University: Welcome and Opening Remarks

8:15 - 9:00 am George Church, Harvard & MIT: Opening Lecture – Unleashing technology: “The Future without Limit”

9:00 – 9:30 am Shengdar Tsai, Department of Hematology, St. Jude Children’s Hospital, Memphis, Tennessee: Strategies for Defining and Improving Specificity of CRISPR-Cas9 Genome Editing

9:30 – 9:50 am Refreshment break

SESSION 2: Livestock Industry Perspective

Session Moderator: Diane Wray-Cahen

9:50 – 10:15 am Mark Cigan, Trait Development, Genus Research

10:15 – 10:40 am Michael Lohuis (Dairy & Beef), Semex

10:40 – 11:05 am Rachel Hawken (Poultry), Cobb-Vantress, Inc.

11:05 – 11:30 am Tom Rathje (US Swine), DNA Genetics

11:30 – 12:00 pm Panel discussion

12:00 – 1:30 pm Lunch

SESSION 3: Biomedical 1 (human disease models)

Session Moderator: TBD

1:30 – 2:00 pm Chris Davies, USU: Production of an ovine interferon type 1 receptor knockout model

2:00 – 2:30 pm Angelika Schnieke, Technical University of Munich: Genetically engineered large animal models for cancer research

2:30 – 3:00 pm John Swart, Exemplar Genetics: Models for Rare Human Disease

3:00 – 3:40 pm Poster Flash Talks – Group 1 (2 min/poster introductory poster presentations)

3:40 – 3:50 pm Break

POSTER SESSION

3:50 – 5:20 pm POSTER PRESENTATIONS with Wine and Cheese

Tuesday, June 5, 2018

7:00 am – 6:00 pm Registration

SESSION 4: Farm Animal Breeding

Session Moderator: TBD

8:00 – 8:30 am Jon M. Oatley, WSU: Generation of germline ablated male pigs by CRISPR/Cas9 editing of the NANOS2 gene

8:30 – 9:00 am Yong Zhang, Key Laboratory of Animal Biotechnology, Ministry of Agriculture, Northwest A&F University, Yangling, China: Gene Editing for TB Resistance

9:00 – 9:30 am Bhanu Telugu, University of Maryland: Influenza resistant pigs

9:30 – 10:00 am Poster Flash Talks – Group 2 (2 min/poster introductory poster presentations)

10:00 - 10:20 am Refreshment break

SESSION 5: Biotechnology

Session Moderator: TBD

10:20 – 10:50 am Marie-Cecile Van de Lavoie, Crystal Bioscience: Ab production

10:50 – 11:20 am Hua Wu or Eddie Sullivan, Sab Biotherapeutics: Using fully human antibodies from TC bovine to fight infectious diseases

11:20 – 11:50 am Pablo Ross, UC Davis: Interspecies chimeras

11:50 – 12:05 pm Selected abstract presentation

12:05 – 12:20 pm Selected abstract presentation

12:20 pm – Free Time

Wednesday, June 6, 2018

7:00 - 10:00 am Registration

SESSION 6: Biomedical 2 (human disease models)

Session Moderator: TBD

8:00 – 8:30 am Irina Polejaeva/Ken White or Zonda Wang (USU) Sheep model of Cystic Fibrosis.

8:30 – 9:00 am Younqlun Luo, BGI model development

9:00 – 9:30 am Tom Wishart, Roslin: New neurological model

9:30 – 9:45 am Selected abstract presentation

9:45 – 10:00 am Selected abstract presentation

10:00 – 10:20 am Refreshment break

SESSION 7: Risk Assessment and Bioethics of GE Livestock

Session Moderator: Alison Van Eenennaam or Mark Walton

10:20 – 10:50 am Samantha Noll, Washington State University: Bioethics of genetically engineering livestock

10:50 – 11:20 am Heather Lombardi, emerging technology team leader, CVM, FDA: Regulation of genome-editing

11:20 – 11:50 am Larisa Rudenko, Massachusetts Institute of Technology (the Center for International Studies): How to conduct effective risk or safety assessments

11:50 – 12:20 pm Panel discussion

12:20 – 1:30 pm Lunch

SESSION 8: Feeding the world

Session Moderator: TBD

1:30 – 2:00 pm Yangfang Wang, Chinese Academy of Agricultural Sciences

Production of leaner pigs with better thermoregulation

2:00 – 2:30 pm Tad Sonstegard, Recombinatics Inc., SLICK cattle.

2:30 – 3:00 pm Steve Kemp, Trypanosomes.

3:00 – 3:30 pm Bruce Whitelaw: Closing Remarks