



**Advances in Genome Biology and Technology
Phoenix, Arizona**

Saturday, April 13

2:00 p.m. – 7:00 p.m. **AGBT Meeting Registration**

Sunday, April 14

Transfers 1 p.m. – 8 p.m. Phoenix Sky Harbor International Airport (PHX)

7:00 a.m. – 7:00 p.m. **AGBT Meeting Registration**
Akimel Foyer

4:00 p.m. - 6:00 p.m. **RCN Farm Animal Genomics Workshop**
Sergey Koren, NIH
Fiona McCarthy
Darren Hagen
Angelica Van Goor
“The future of farm animal genomics research”

Monday, April 15

Scientific Program

6:30 a.m. – 7:30 a.m. **Rise and Shine with AGBT – Optional Activity**
Meet at Hospitality Desk

7:30 a.m. – 7:00 p.m. **Meeting Registration / Hospitality Desk**
Akimel Foyer

7:30 a.m. – 9:00 a.m. **Breakfast**
Akimel Patio & Mesquite Terrace

9:00 a.m. – 9:10 a.m. **Opening Remarks, (Sarah Hearne, Genetic Resources Program Director a.i. (GPR), CIMMYT and Co-Chair of the AGBT Ag Scientific Organizing Committee)**
Komatke

Plenary Session I: **Global Opportunities and Challenges for Agriculture, I (Susan McCouch, Professor of Plant Breeding and Genetics, Cornell University, Session Chair)**

9:10 a.m. – 9:40 a.m. **Ben Hayes, Queensland Alliance for Agriculture and Food Innovation, Centre Director, Animal Science, The University of Queensland**

9:40 a.m. – 10:10 a.m. **Damaris Odeny, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Principal Scientist**

10:10 a.m. – 10:30 a.m.	(Abstract Selected Talk)
10:30 a.m. – 11:00 a.m.	Coffee Break, Sponsors and Exhibits Akimel Foyer
Plenary Session II:	Global Opportunities and Challenges for Agriculture, II (Nathan Lakey, Orion Genomics, Session Chair) Komatke
11:00 a.m. – 11:30 a.m.	Ross Houston, Benchmark Holdings, Director of Genetics and Innovation
11:30 a.m. – 12:00 p.m.	Howard Shapiro, Agricultural Sustainability Institute, UC Davis
12:00 p.m. – 12:20 p.m.	Gold Sponsor Talk Komatke
12:20 p.m. – 2:00 p.m.	Lunch Akimel Patio & Mesquite Terrace
12:40 p.m. – 2:10 p.m.	Workshops and Lunch
12:40 p.m. - 2:10 p.m.	Single Cell Technology in Plants and Animals Workshop and Lunch Discuss updates to cell atlases being built in plants and animals, computational best practices or new ways to analyze this data, and examples of its use to test novel hypotheses.
2:10 p.m. – 2:55 p.m.	Dessert & Coffee with Exhibitors Akimel Foyer
Plenary Session III:	Applying the Science, I Jack Dekkers, Distinguished Professor, section leader of animal breeding and genetics, Iowa State University) Komatke
3:00 p.m. – 3:30 p.m.	Diane Saunders, John Innes Centre, Group Leader, Head of Department
3:30 p.m. – 4:00 p.m.	Samuel Oyola, Senior Scientist, Head of Genomics, International Livestock Research Institute (ILRI)
4:00 p.m. – 4:20 p.m.	(Abstract Selected Talk)
4:20 p.m. – 4:35 p.m.	Silver Sponsor Talk – Komatke
4:35 p.m. – 5:05 p.m.	Coffee Break, Sponsors and Exhibits Akimel Foyer

Plenary Session IV:	Precision Genetic Technologies, (Alison Van Eenennaam, Cooperative Extension Specialist, Animal Genomics and Biotechnology, University of California, Davis, Session Chair) Komatke
5:05 p.m. – 5:35 p.m.	Ermias Kebreab, University of California, Davis, Associate Dean
5:35 p.m. – 6:05 p.m.	Yang Xiahong, Chinese Agricultural University
6:30 p.m. – 9:30 p.m.	Welcome Dinner Akimel Lawn
Tuesday, April 16	(Morning)
7:30 a.m. – 7:00 p.m.	Hospitality/Information Desk Akimel Foyer
7:30 a.m. – 9:00 a.m.	Breakfast Akimel Patio & Mesquite Terrace
Plenary Session V:	Informatics and Data Analytics I (Daniella Lourenco, University of Georgia, Co-Chair of the AGBT Ag Scientific Organizing Committee, and Session Chair) Komatke
9:00 a.m. – 9:30 a.m.	Charlie Messina, University of Florida
9:30 a.m. – 10:00 a.m.	Eric Psota, PIC North America, Digital Innovation Manager
10:00 a.m. – 10:20 a.m.	(Abstract Selected Talk)
10:20 a.m. – 10:40 a.m.	(Abstract Selected Talk)
10:40 a.m. – 11:10 a.m.	Coffee Break and Exhibits Akimel O’otham
	Plenary Session VI: Informatics and Data Analytics II: (Bruce Walsh, Professor of Ecology and Evolutionary Biology, University of Arizona, Chair) Komatke
11:10 a.m. – 11:40 a.m.	Mario Calus, Wageningen University, Associate Professor, Animal Breeding and Genomics
11:40 a.m. – 12:00 p.m.	AGBT Next Gen Leadership Awards
12:00 p.m. – 2:00 p.m.	AGBT Lunch Akimel Patio & Mesquite Terrace

12:20 p.m. – 1:50 p.m.	Data Sharing While Protecting Confidential and Proprietary Content Workshop and Lunch The workshop will focus on current and new directives by governments and journals for sharing research data and how these can be aligned with the need to protect confidential or proprietary information that may be contained in the data.
12:20 p.m. - 1:50 p.m.	AgT2T - All Species Workshop and Lunch In this workshop you will hear from speakers about strategies and the benefits of telomere to telomere genome assemblies for several agricultural species. An update will be provided on the recent T2T ruminant workshop and collaborative work.
1:50 p.m. – 2:45 p.m.	Dessert & Coffee with Sponsors Akimel Foyer
2:45 p.m. – 2:57 p.m.	Bronze I Talk - Komatke
2:57 p.m. – 3:09 p.m.	Bronze II Talk – Komatke
3:09 p.m. – 3:21 p.m.	Bronze III Talk – Komatke
Plenary Session VI:	From FASTQ to Fork (Len Pennacchio, DOE Joint Genome Institute, Lawrence Berkeley National Laboratory, Session Chair) Komatke
3:25 p.m. – 3:55 p.m.	Cathie Martin, John Innes Centre
3:55 p.m. – 4:25 p.m.	Geoff Morris, Colorado State University
4:25 p.m. – 4:45 p.m.	Abstract Selected Talk
4:45 p.m. – 5:05 p.m.	Poster Flash Talks
5:15 p.m. – 7:30 p.m.	Posters & Palate Pleasers (Heavy appetizers)
Beginning at 7:35 p.m.	Click2Win (Engage with sponsors and exhibitors to win great prizes, including free registration to next year’s AGBT Ag)
Wednesday, April 17	(Morning)
7:30 a.m. – 7:00 p.m.	Hospitality/Information Desk Akimel Foyer
7:30 a.m. – 9:00 a.m.	Breakfast Akimel Patio & Mesquite Terrace

Plenary Session VII:	Unlocking Innovation From Basic Science I, (Appolinaire Djikeng, Director General, International Livestock Research Institute (ILRI), Senior Director, CGIAR Livestock-based systems, Session Chair) Komatke
9:00 a.m. – 9:30 a.m.	Elinor Karlsson, Broad Institute of MIT and Harvard, Director of the Vertebrate Genomics Group
9:30 a.m. – 10:00 a.m.	Giles Oldroyd, University of Cambridge, Director, Crop Science Centre
10:00 a.m. – 10:20 a.m.	(Abstract Selected Talk)
10:20 a.m. – 10:40 a.m.	(Abstract Selected Talk)
10:40 a.m. – 11:10 a.m.	Coffee Break and Exhibits Akimel Foyer
Plenary Session VIII:	Unlocking Innovation From Basic Science II (Susan Wessler, Distinguished Professor of Genetics, University of California, Riverside, Session Chair) Komatke
11:10 a.m. – 11:40 a.m.	Nathan Springer, Bayer, Head of Genetic and Genomic Innovation
11:40 a.m. – 12:00 p.m.	(Abstract Selected)
12:00 a.m. – 12:20 p.m.	(Abstract Selected)
12:20 p.m. – 2:00 p.m.	Lunch Akimel Patio & Mesquite Terrace
12:20 p.m. – 1:50 p.m.	Workshop Lunch Komatke

12:40 p.m. - 2:10 p.m.

Functional Annotation of Animal Genomes (FAANG) Workshop and Lunch (Chair, Dr. Martien Groenen, Wageningen University, The Netherlands)

Dr. Emily Clark, Roslin Institute, Edinburgh, UK

Dr. Richard Crooijmans, Wageningen University, The Netherlands

Dr. Lingzhao Fang, Aarhus University, Denmark

Dr. Irene Kaplow, Carnegie Mellon University, Pittsburgh, USA

Dr. Martien Groenen, Wageningen University

Chair: Dr Martien Groenen, Wageningen University, The Netherlands

FAANG celebrates its 10th anniversary to discover basic functional knowledge of genome function to decipher the genotype-to-phenotype (G2P) with an emphasis on farmed animals and its applications in animal breeding. It provides fundamental insight in molecular mechanisms underlying complex traits, adaptive evolution, domestication, and speciation and as such overlaps with other large ongoing projects like the Farm animal Genotype-Tissue Expression (FarmGTEx) project and the Zoonomia project aimed at discovering the genomic basis of shared and specialized traits in mammals. This workshop is aimed at exploring and strengthening further collaborations between these different ongoing projects.

Plenary Session IX

Quantitative and Molecular Genetics, Charlie Johnson, Executive Director Genomics & Bioinformatics, Texas A&M AgriLife, Session Chair)
Komatke

2:45 p.m. – 3:15 p.m.

Mike Gore, Cornell University, Chair of the Plant Breeding and Genetics Section in the School of Integrative Plant Science

3:15 p.m. – 3:45 p.m.

Xuelu Wang, Henan University, Distinguished Professor and doctoral supervisor

3:45 p.m. – 4:05 p.m.

Abstract Selected Talk

4:05 p.m. – 4:25 p.m.

Abstract Selected Talk

4:25 p.m. – 4:55 p.m.

Coffee Break
Akimel Foyer

Plenary Session X

From the Cutting Edge-New Ideas and Opportunities, Renee Lafitte, Deputy Director for crops R&D, Bill and Melinda Gates Foundation, Session Chair)

5:00 p.m. – 5:20 p.m.

(Abstract Selected)

5:20 p.m. – 5:40 p.m.

(Abstract Selected)

5:40 p.m. – 6:00 p.m.

(Abstract Selected)

6:00 p.m. – 6:20 p.m.

(Abstract Selected)

6:20 p.m. – 6:40 p.m.

(Abstract Selected)

6:40 p.m. – 6:50 p.m.

Closing Comments and Click2Win Announcements (Sarah Hearne, Principal Scientist, International Maize, and Wheat Improvement Center (CIMMYT) and AGBT Ag Conference Co-Chair)

7:15 p.m. – 10:00 p.m.

Farewell Dinner Party
Hemapik Lawn

Thursday, April 18

Transfers 4 a.m. – 2 p.m. to Phoenix International Airport (PHX)