**Invited Keynote Presentations**

**Opening keynote** **lecture:** **Prof. German Spangenberg, La Trobe University, Australia**

Advances in systems biology and molecular breeding of forages

* **Germplasm, Diversity, and Its Impact on Breeding**
1. **Keynote speech: Luke Pembleton, La Trobe University, Australia**

Enabling F1 hybrid breeding and rapid implementation of genomic selection in perennial ryegrass breeding

1. **Keynote speech: Gongshe Liu, Chinese Academy of Sciences, China**

Mechanism of gene alternative splicing and its impact on plant breeding

1. **Keynote speech: Maofeng Cai, The Samuel Roberts Noble Foundation, USA**

Molecular mechanism of seed physical dormancy in *Medicago truncatula*

* **Abiotic and Biotic Stresses**
1. **Keynote speech: Suo-Min Wang, Lanzhou University, China**

The physiological adaptation and forage quality of T1 transgenic alfalfa co-expressing *ZxNHX* and *ZxVP1-1* from *Zygophyllum xanthoxylum* in response to stress conditions

1. **Keynote speech: Bingru Huang, Rutgers University, USA**

Molecular and metabolic regulatory mechanisms of stress-induced leaf senescence in grass species

1. **Keynote speech: Zhenfei Guo, South China Agricultural University, China**

Exploring cold tolerance in *Medicago sativa* spp. *falcata*

* **Bioenergy and Biorenewables**
1. **Keynote speech: Toshihiko Yamada, Hokkaido University, Japan**

Molecular breeding of perennial biomass crops

1. **Keynote speech: Malay Saha, The Samuel Roberts Noble Foundation, USA**

Molecular breeding for sustainable switchgrass improvement

* **Emerging Tools for Forage and Turf Research**
1. **Keynote speech: Paul Hooykaas, Leiden University, The Netherlands**

Agrobacterium mediated protein and T-DNA delivery: a toolbox for plants and fungi

1. **Keynote speech: Pieter Badenhorst, La Trobe University, Australia**

The development of a field-based forage phenomics platform

1. **Keynote speech: Maria Monteros, The Samuel Roberts Noble Foundation, USA**

Alfalfa breeder’s toolbox and alfalfa genome sequencing

* **Functional Genetics and Genomics and Genetic Mapping**
1. **Keynote speech: Xinquan Zhang, Sichuan Agricultural University, China**

High-density genetic linkage map construction and identification of flowering time QTLs in orchardgrass by SSR and SLAF-seq

1. **Keynote speech: John Forster, La Trobe University, Australia**

Genetics and genomics of self-incompatibility in forage grasses

1. **Keynote speech: Noel Cogan, La Trobe University, Australia**

The structure of the perennial ryegrass genome

1. **Keynote speech:** **Hans Daetwyler, La Trobe University, Australia**

Genomic selection in forage grasses

1. **Keynote speech: Zhuo Yu, China**

Construction of high-density molecular genetic maps and QTLs for main agronomic traits of tetraploid hybrid wheatgrass

* **Plant-Microbe Interactions**
1. **Keynote speech: Carolyn Young, The Samuel Roberts Noble Foundation, USA**

It's the little things that matter: microbes that impact forage production

1. **Keynote speech: Kevin Smith, La Trobe University, Australia**

Developing a co-existence framework for GM forages in grazing systems

**Closing keynote lecture: Prof. Zeng-Yu Wang, The Samuel Roberts Noble Foundation, USA**

Future perspectives of forage improvement