

# Field Day: International Centers & Partnerships: Genetic Improvement Resources and Opportunities



Agricultural Genome to  
Phenome Initiative



## CTLGH: A Partnership for Livestock Genetic Improvement in Smallholder Production Systems

The Centre for Tropical Livestock Genetics and Health (CTLGH) is a strategic alliance of the Roslin Institute at the University of Edinburgh, Scotland's Rural College and the International Livestock Research Institute (ILRI). The focus of CTLGH is on genetic improvement of tropical livestock in smallholder systems and its activities are built as collaboration with farmer-facing programs. CTLGH runs a mix of research and development projects and capacity development interventions focused on creating and accelerating genetic gains in smallholder livestock systems. The overall research strategy is built on the integration of phenotypes, performance and genotypes data to leverage quantitative genetics, genomics, computational biology, reproduction technologies and data science capabilities for the development of tools, technologies, resources and capacities for genetic improvement.

## CIMMYT: One CGIAR and International Crop Research and Development – New Frameworks and New Opportunities for Impact – A Maize Example

The CGIAR is a global research partnership of international centres working to deliver science and innovation that advance the transformation of food, land, and water systems in a climate crisis. The vision of One CGIAR is a world with sustainable and resilient food, land, and water systems that deliver diverse, healthy, safe, sufficient, and affordable diets, and ensure improved livelihoods and greater social equality, within planetary and regional environmental boundaries. The development and delivery of new genetics of crops, accelerating the rate of genetic gains in farmers' fields is a key focus of the One CGIAR. New models for partnerships along the development to deployment continuum, scaled approaches to operations and breeding support, accelerated breeding technologies and the leveraging of quantitative genetics principles underpin the development and delivery of appropriate improved varieties to farmers in LMICs.

### About the presenters:



**Appolinaire Djikeng** is the Director of the Centre for Tropical Livestock Genetics and Health (CTLGH) and chair of Tropical Agriculture and Sustainable Development. His research, capacity building and international development interests are centered on genetic improvement for sustainable and profitable livestock development in tropical low- and middle-income countries.



**Kellie Watson** is a principle investigator at the Roslin Institute and the program leader for poultry at CTLGH. With a background in quantitative and molecular genetics, for the past 15 years her research has focused predominantly on poultry.



**Sarah Hearne** is a crop geneticist at CIMMYT, The International Maize and Wheat Improvement Centre. With more than 20 years of experience in public sector research for development, her work focuses in the translatory space between basic and applied science, in particular the trait discovery and deployment space underpinning genetic improvement of crops for today's and tomorrow's world.

**May 18, 2022**

**10:30 AM–12:00 PM**

(CentralTime, –5 GMT)

**Purpose:** Highlight the work of two centers, their goals and needs, as well as their efforts in building community.

**Register for this Zoom virtual meeting:**

<https://tinyurl.com/AG2PI-FD18>

Upon registration, you will receive a confirmation email with information about joining the meeting.

A recording will be available at a later date at: [ag2pi.org/](https://ag2pi.org/)



Agricultural Genome to Phenome Initiative (AG2PI) is funded by USDA-NIFA awards 2020-70412-32615 and 2021-70412-35233.