

Field Day: Industry Showcase



Phenospex – Combining 3D & Gravimetric Data to Breed Climate-Smart Crops

Restricting transpiration under high vapor pressure deficit (VPD) is a promising water-saving trait for drought adaptation. However, it is often measured under controlled conditions and at very low throughput, unsuitable for breeding. A few high-throughput phenotyping (HTP) studies exist, and have considered only maximum transpiration rate in analyzing genotypic differences in this trait.

Presenter:



With a master's degree in crop breeding, Paul McMahon has been working with Phenospex for seven years. He provides business development for digital plant phenotyping solutions to plant researchers.

EpiCypher – Beyond the Genome: Leveraging Epigenomic Mapping to Uncover Phenotypic Determinants

Phenotypic outcomes are intrinsically linked to chromatin dynamics. Understanding how chromatin integrates genetic and environmental factors to mediate gene expression can inform robust biological predictors, but advances have been hampered by current approaches. EpiCypher's CUTANA™ CUT&RUN and CUT&Tag technologies enable high resolution mapping of chromatin features using a fraction of the cells and sequencing depth compared to ChIP-seq, the historical approach for epigenomic mapping. While CUT&RUN and CUT&Tag have been primarily applied for human disease research, this presentation will illustrate how these ultra-sensitive and scalable technologies can unlock the full potential of epigenomics for agricultural research.

Presenter:



Andrea Johnstone, Ph.D., is the Senior Director of Product Development at EpiCypher, a pioneer of innovative research solutions to advance chromatin science.

This field day is a result of an open call for presenters. AG2PI does not endorse or benefit otherwise from the companies presenting at this event.

Aug. 17, 2022

10:30 AM–12:00 PM
(Central Time, –5 GMT)

Purpose: To share new technologies developed via industry that could be applied to genomic research.

Register for this Zoom virtual meeting:

<https://tinyurl.com/AG2PI-FD20>

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/



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