AG2PI

Agricultural Genome to Phenome Initiative

WORKSHOP

A Practical Guide to Genome-Wide Association Studies (GWAS)

In this workshop, Zihao Zheng will go through the basics of genome-wide association studies (GWAS) including the experimental design, comparisons of different GWAS models, statistical analyses and interpretation of GWAS results. The workshop will include hands-on tutorials of running GWAS with some popular software: from formatting and filtering of input phenotype data and genetic markers, parameters fine-tuning of GWAS models, visualization of GWAS results and some downstream analyses. Participants will be able to explore GWAS for their own projects with the frameworks and resources provided in this workshop.

About the Presenter
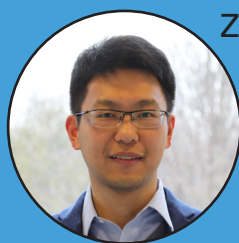
Zihao Zheng is a Ph.D. candidate in the Schnable Lab at Iowa State University. His research focuses on utilizing large-scale genomic and transcriptomic data for candidate gene discovery in maize via genome-wide association studies (GWAS), and trait predictions using machine learning models. He also works closely with engineers and computer scientists to develop high-throughput phenotyping pipelines for novel traits extraction from images.

June 24, 2021
1:00–3:00 PM
(Central Time, –5 GMT)

Limited attendance to 50 participants

Purpose: Introduce basics of genome-wide association studies (GWAS) and get hands-on experience with analysis of real-world data.

Register for this Zoom virtual workshop:

https://user.cyverse.org/workshops/68

Upon registration, you will receive a confirmation email.

A recording will be available at a later date at: ag2pi.org/

IOWA STATE UNIVERSITY · THE UNIVERSITY OF ARIZONA · University of Idaho · UNIVERSITY OF Nebraska Lincoln