

Harnessing the Ag Genomics Data Torrent: A Community-driven Discussion on Best Practices for Using and Reusing Genomics Data

The livestock and crop communities are accelerating the creation of functional genomics data to uncover the link between genotype and phenotype. AG2PI is striving to identify the critical requirements to accelerate such research across these communities. We have identified an important current and future requirement for this advancement is better methods for integrating disparate datatypes to allow new insights. For example, one specific goal of functional genomics is to predict regulatory elements across cells, tissues, individuals and populations. Tools are needed to easily help gather raw data, create processed files and visualize the results of further analysis, such as a web-browser display of chromatin state maps, to extend the availability of such data to many more groups.

In this workshop, we will hear from speakers describing current solutions to data visualization and reuse in several genomics communities, as well as discuss as a group the paths to nurture a sustainable set of such tools. Our discussion is intended to include improving, standardizing and maintaining inputs (data and metadata), as well as creating, enhancing and supporting tools for mining such data. Following the presentations, a roundtable discussion will be held on what is next and how to organize to create data reuse tools.

Workshop Speakers and Presentations

Zhiping Weng – Web-based tools for user access to a registry of regulatory elements in human and mouse

Leonore Reiser – The AgBioData Research Coordination Network: Ensuring FAIR agricultural data through community-based standards

Peter Harrison – The FAANG data portal: Current and future perspectives

Alenka Hafner – The reuse of public datasets: Potential risks and rewards from a student's perspective

Chris Elsik – FAANGmine

February 9, 2022

10:00 AM–12:00 PM
(Central Time, -6 GMT)

Purpose: Learn of various solutions for genomics data usage and share ideas for improving data inputs and tools.

Register for this Zoom virtual workshop:

<https://tinyurl.com/AG2PI-CW3>

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

A recording and related materials will be available at a later date at:
www.ag2pi.org/