Dear Arabidopsis community,

The Steering Committee of the recently-formed International Arabidopsis Informatics Consortium (IAIC, definition below) is developing a **Design Workshop** which is envisioned as a 2.5 day event with discussions facilitated by a professional moderator. The purpose of the Design Workshop is to bring together individuals to discuss the format and capabilities that the future Arabidopsis Informatics Portal (AIP, definition below) should have. It is anticipated that the AIP will partially rely on functionalities developed over the last few years by the iPlant Collaborative (iPC). iPC is an NSF-funded project to develop cyberinfastructure and computational tools for plant science.

Due to logistical constraints, the Workshop will be limited to about 30 key participants as described below. However, the Steering Committee welcomes and solicits input from the broader community and is looking into various ways for additional community participation which will be updated on the IAIC website as they unfold. See '**Providing Input**' below as well.

Workshop attendees are expected to fill various roles including, but not limited to:

- (1) Cyberinfrastructure and Bioinformatics experts- those with the technical knowledge to develop the AIP and facilitate interactions with external bioinformatics resources.
- (2) 'Representative Users'- major data generators to include users from a variety of communities and research areas that can provide examples and 'test cases' of current and future bioinformatic needs, challenges, and approaches.
- (3) 'Lead Users'- individuals (in computing especially) that are forward-thinking about future computing requirements and challenges.
- (4) Provocateurs'- individuals that can assist by challenging the thinking of other attendees and act as 'devil's advocates.' These individuals will likely be from outside the Arabidopsis basic research community to provide different perspectives (e.g. industry and other organismal database experts).
- (5) Agency Observers- key members of funding agencies from major countries supporting Arabidopsis research (e.g. USA, UK, Germany, etc) who are invested in supporting plant research now and into the future. Their financial support is absolutely vital to the long-term sustainability of Arabidopsis resources.

## **Expected Outcomes of the Design Workshop:**

- (1) one or a couple of teams of investigators ready to submit a proposal to prototype the AIP to the NSF or other funding agencies, with coordination across borders for international cosubmission, if possible.
- (2) preliminary guidelines for community members wishing to develop core components (or 'modules') that will link to the AIP (defined below.)
- (3) guidelines for the IAIC Scientific Advisory Board (SAB, defined below), that is expected to be formed by Spring, 2012 and will be critical to advising progression of the IAIC.
- (4) input to relevant funding agencies on community needs especially with respect to funding aspects of the IAIC (e.g. AIP and modules.)

## **Providing Input:**

If community members wish to provide input to the Steering Committee regarding the Design Workshop (which is planned for Dec. 11-14, 2011), or any other related matter, please email the IAIC (<a href="mailto:arabidopsisinformatics@gmail.com">arabidopsisinformatics@gmail.com</a>) or by clicking the 'Email the IAIC' link near the bottom of the preliminary webpage:

http://arabidopsis.org/portals/masc/IAIC.jsp

## **Definitions used:**

IAIC - International Arabidopsis Informatics Consortium. These are the contributors to core and non-core resources. The IAIC director is yet to be named, to be elected by the IAIC based on recommendations from the SAB. The interim IAIC director is Blake Meyers. The IAIC Steering Committee consists of members on the NSF RCN (Award Number: 1062348): PI Blake Meyers, University of Delaware, Co-PIs Erich Grotewold (Ohio State University), Doreen Ware (CSHL), Jim Carrington (Danforth Center), Volker Brendel (Iowa State University), and other senior personnel: Nicholas Provart (University of Toronto, Canada), Dan Stanzione and Rion Dooley (UT-Austin/iPC); Ruth Bastow (GARNet, UK), and Jim Beynon (University of Warwick, UK). The IAIC itself extends to the larger community and includes investigators (from any nation) contributing Arabidopsis modules and resources.

AIP - Arabidopsis Informatics Portal. The primary interface providing dynamic access to core resources and key non-core resources, and links to "boutique databases". This is yet to be formed or funded, but will be a critical resource to be funded competitively in one or more of the nations with a significant Arabidopsis scientific presence. This will act as the central hub for coordination of Arabidopsis informatics, and will define standards for data storage and access and interconnectivity.

Core component - Module essential for the functioning of the IAIC including the central portal, the "gold standard" genome, literature curation, and stock center resources; currently provided in part by TAIR.

Non-core component - Module identified by the IAIC as an essential component once the core modules are in place; the definition of core/non-core is dynamic and will depend on the community needs.

Boutique databases - Resources developed for lab-specific projects that may be of significance to a small group of researchers, but still should be accessible from the AIP, perhaps as links if the data are not formatted according to AIP standards.

SAB - Scientific Advisory Board. Yet to be named; a group of seven international scientists that will actively oversee the IAIC and its activities. Selection will involve input by the Multinational Arabidopsis Steering Committee (MASC).

## **Resources:**

IAIC RCN Proposal: original text can be found: (http://arabidopsis.org/portals/masc/IAIC RCN Aug2010.pdf). The Plant Cell Commentary Publication on establishing the IAIC: (http://www.plantcell.org/cgi/reprint/tpc.110.078519v2)

With best regards, Joanna Friesner Coordinator of the North American Arabidopsis Steering Committee (NAASC)