

TAIR Report

The Arabidopsis Information Resource

The Arabidopsis Information Resource (TAIR) maintains a [database](#) of genetic and molecular [biology data](#) for the model higher plant *Arabidopsis thaliana*. Data available from TAIR includes the complete genome sequence along with gene structure, gene product information, metabolism, gene expression, DNA and seed stocks, genome maps, genetic and physical markers, publications, and information about the Arabidopsis research community. Gene product function data is updated every two weeks from the latest published research literature and community data submissions. Gene structures are updated 1-2 times per year using computational and manual methods as well as community submissions of new and updated genes. TAIR also provides extensive linkouts from our data pages to other Arabidopsis resources.

The [Arabidopsis Biological Resource Center](#) at The Ohio State University collects, reproduces, preserves and distributes seed and DNA resources of *Arabidopsis thaliana* and related species. Stock information and ordering for the ABRC are fully integrated into TAIR.



TAIR is located at the [Carnegie Institution for Science Department of Plant Biology](#) and funded by the [National Science Foundation](#) with additional support from TAIR sponsors.



Updates on TAIR funding are available [here](#).

Breaking News

 [Subscribe to news feed](#)

 [Follow our Twitter feed](#)

 [Join our Facebook group](#)

Elsevier/TAIR partnership [January 11, 2012]

Elsevier's electronic platform SciVerse ScienceDirect links AGI codes in papers to the corresponding pages at TAIR.

ABRC Outreach Initiative Funded by ASPB [January 11, 2012]

ABRC is pleased to announce funding for the [TRAINED](#) grant by the ASPB Education Foundation Grants (EFG) program.

Ordering Now Available [November 3, 2011]

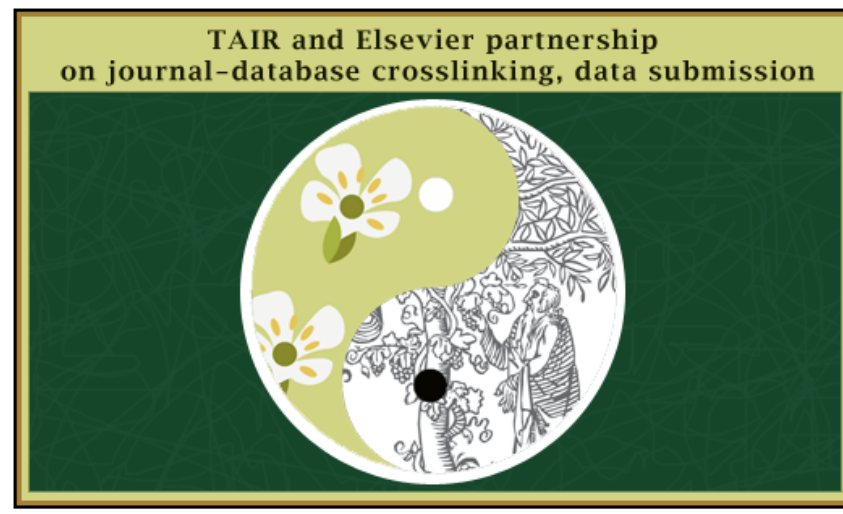
Stock ordering and registration are now fully operational. Please contact us at curator@arabidopsis.org if you experience any problems.

Ordering Not Available [November 1, 2011]

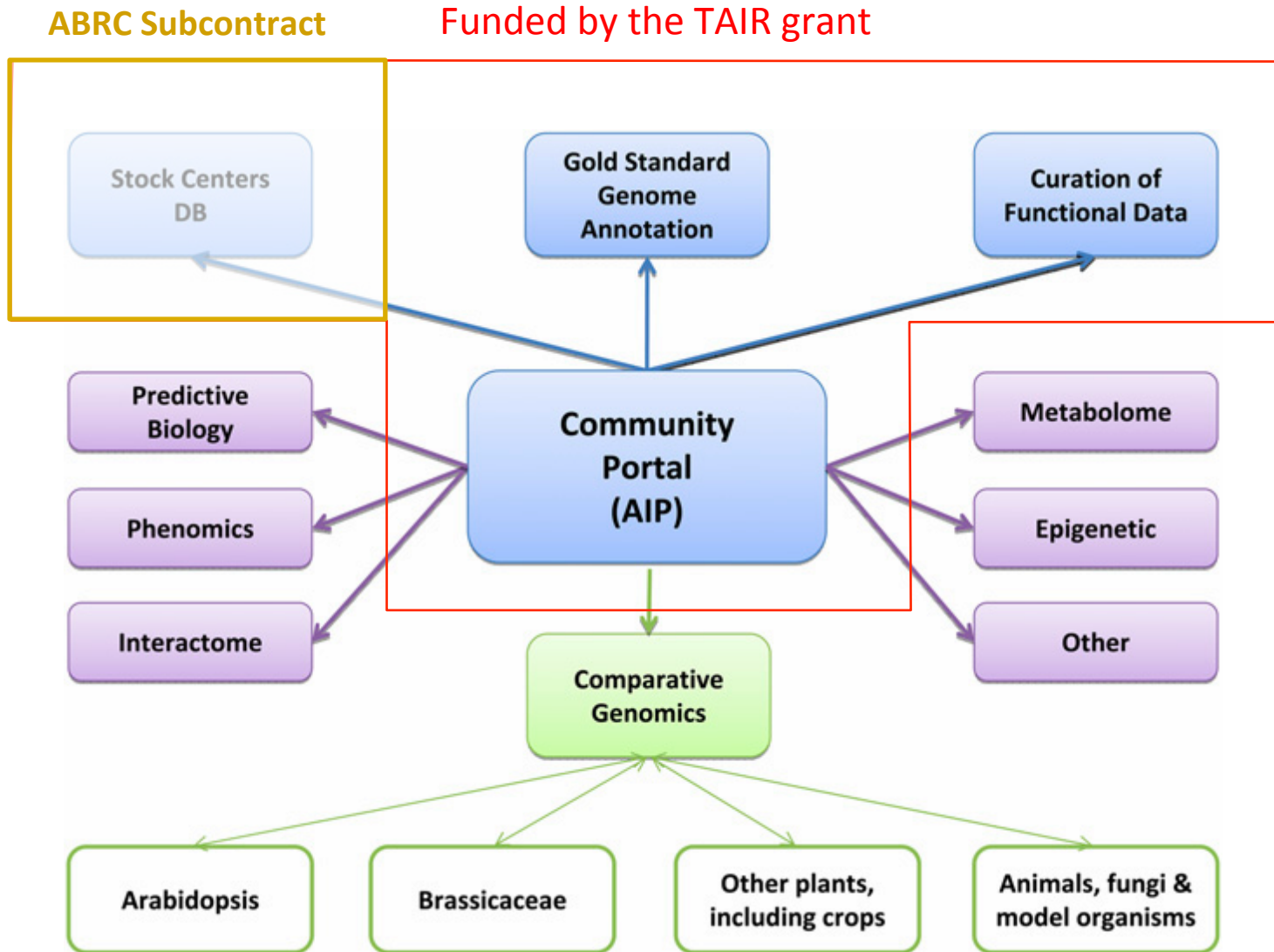
Stock ordering and registration are not available due to problems encountered during the site migration. Please hold off on ordering until further notice.

Site Maintenance Completed [October 31, 2011]

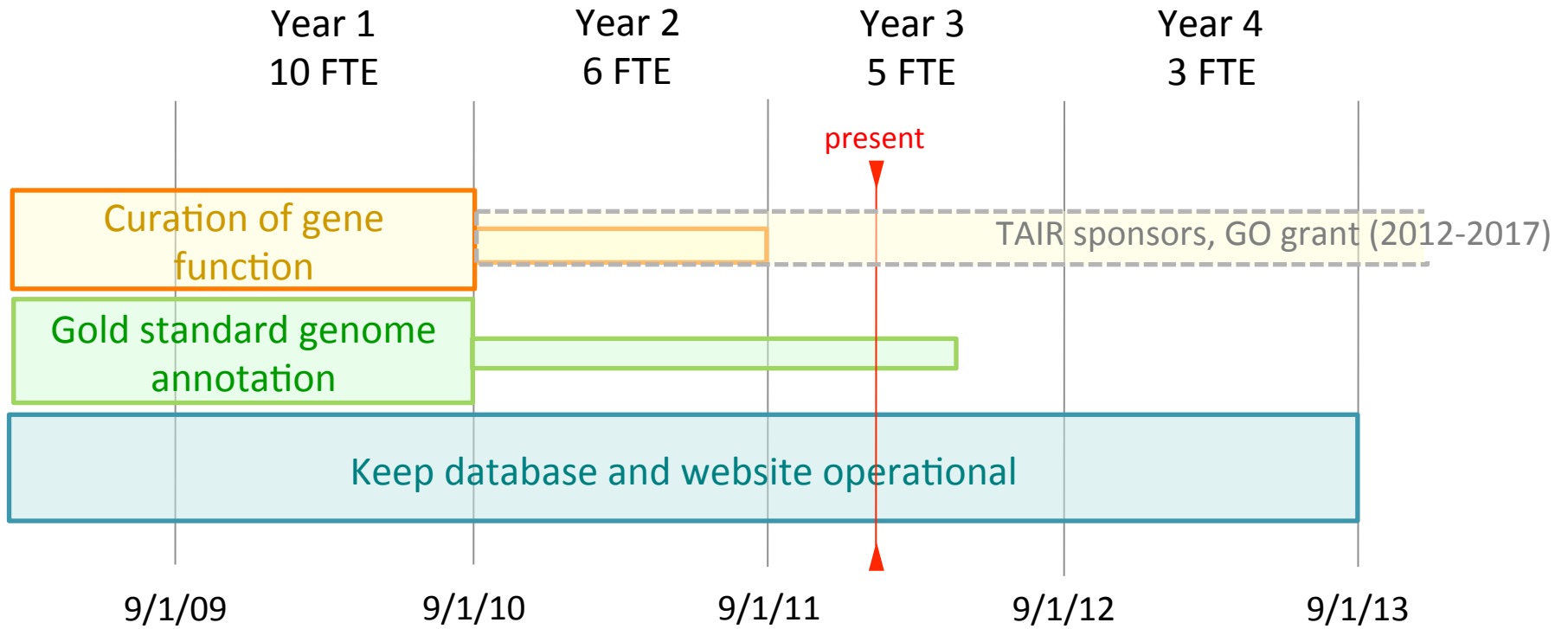
Stock ordering and registration



TAIR scope of responsibility



TAIR3 Grant Overview



Gene function:
GO grant – 1.3 curators
TAIR sponsors – 1
curator

Genome annotation:
1 curator

Database and website:
Programmer
Systems admin
Database admin

TAIR sponsors



tair PARTNER
★ ★ ★ ★

Annual contribution of \$50,000 or more



tair PATRON
★ ★ ★

Annual contribution of \$25,000–\$49,000

Dow Agrosciences, Monsanto



tair SUPPORTER
★ ★

Annual contribution of \$10,000–\$24,000

Gregor Mendel Institute, Syngenta, Pioneer



tair FRIEND
★

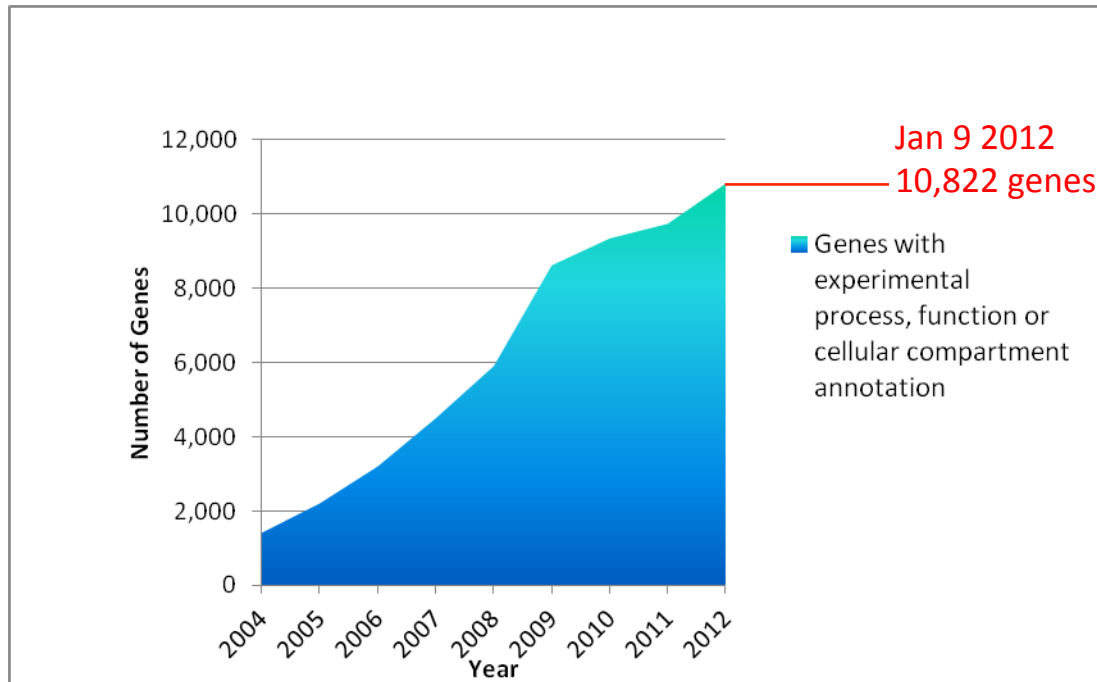
Annual contribution of \$5,000–\$9,000

Additional thanks to :

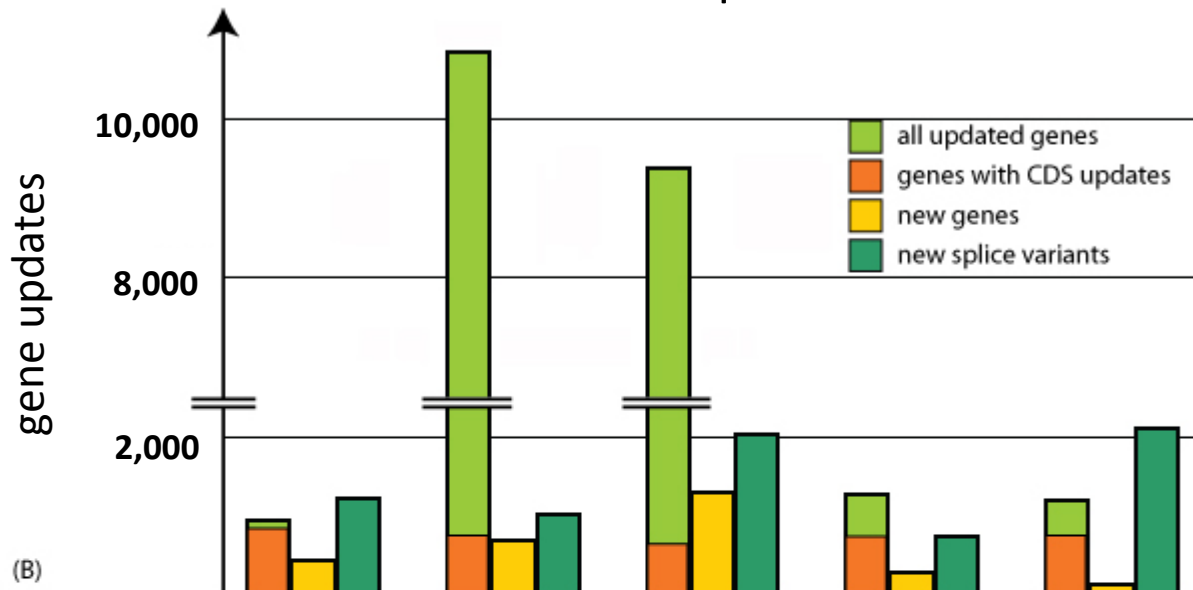
Grassroots Biotechnology

Arabidopsis Gene Function Annotation

- TAIR funding for this activity has ended
- Now funded from sponsorships and NIH (Gene Ontology grant)
- Includes:
 - literature curation (decreasing)
 - direct community submissions (increasing)
 - data from collaborations with 10 plant science journals (increasing)



Arabidopsis Gene Structure Annotation



TAIR release	TAIR6	TAIR7	TAIR8	TAIR9	TAIR10
main experimental datasets used for annotation	cDNAs & ESTs	cDNAs & ESTs	cDNAs & ESTs	cDNAs & ESTs MS peptides	cDNAs & ESTs MS peptides RNAseq
main gene prediction tools used	PASA	PASA	PASA Gnomon	PASA Gnomon Augustus EuGene	Augustus TAU Cufflinks
areas of focus/ comments	TAIR genome annotation pilot project	<ul style="list-style-type: none"> UTRs cysteine-rich peptides other_RNA genes 	<ul style="list-style-type: none"> initial annotation of transposons small ORFs uORFs 	<ul style="list-style-type: none"> pseudogenes 	<ul style="list-style-type: none"> alternative splice-variants B-list genes
updates made to genome sequence	none	none	<ul style="list-style-type: none"> 1425 single nucl. substitutions 14 contaminated regions substituted with Ns 	<ul style="list-style-type: none"> 227 single nucl. substitutions 341 indels 	none

Release date: Nov 2005 Apr 2007 Apr 2008 June 2009 Nov 2010

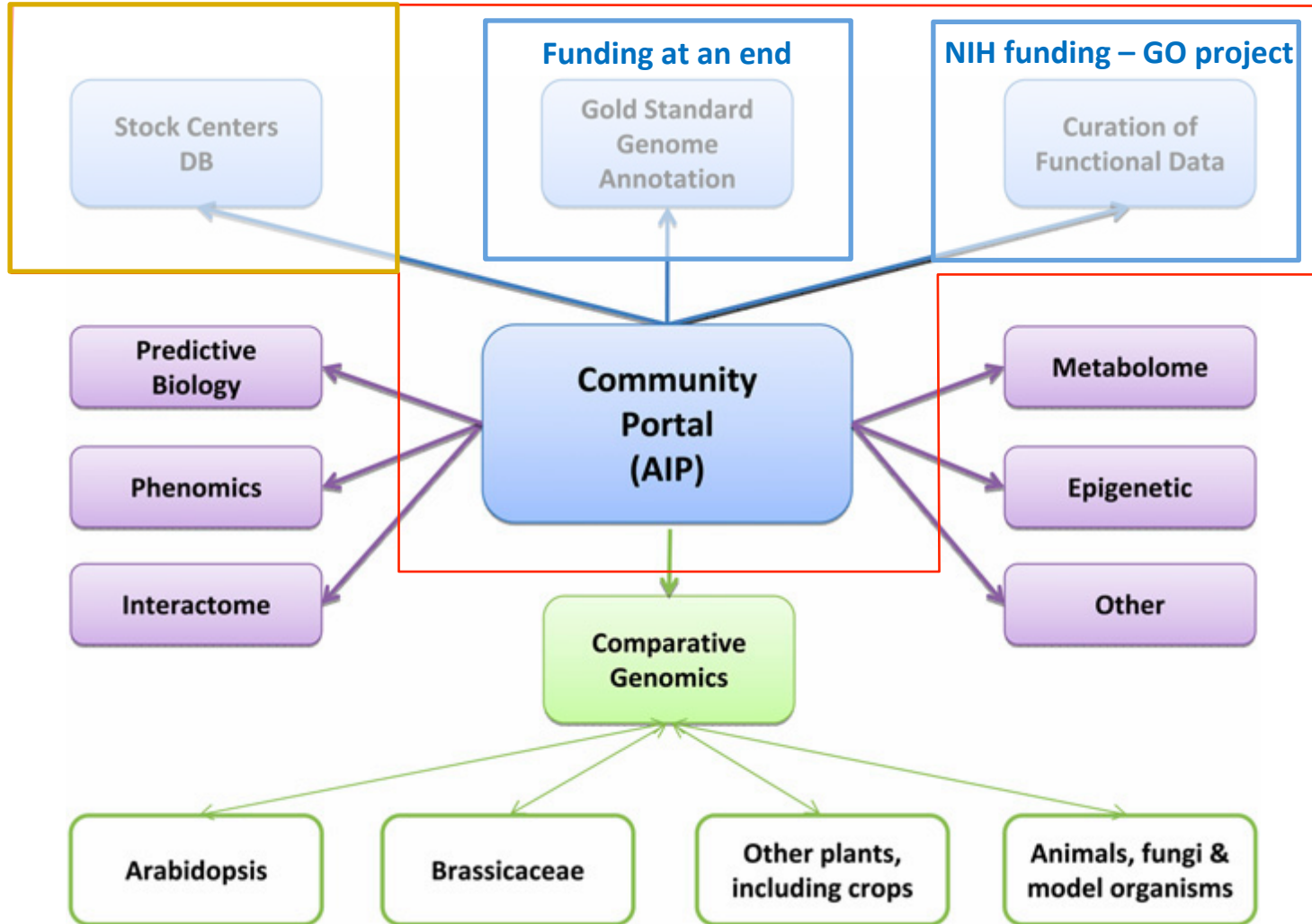
Potential TAIR11 updates:

141 community-submitted gene structure corrections

Proposed IAIC structure

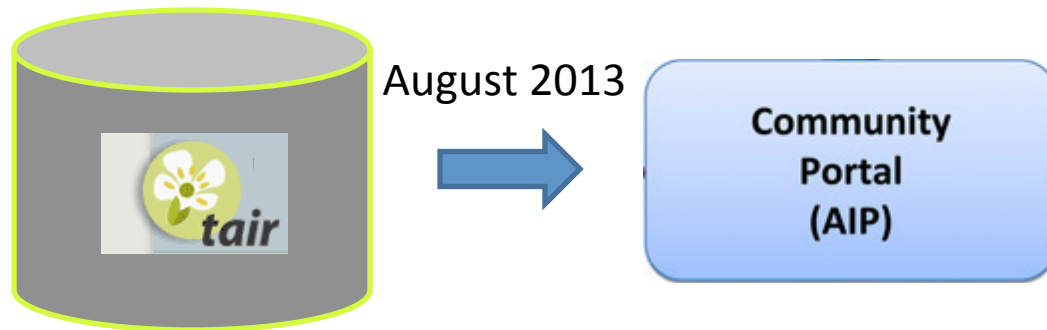
Separate ABRC funding

Funded by the TAIR grant



Funding for the TAIR website ends 8/31/2013 – where will Arabidopsis researchers go for data after this?

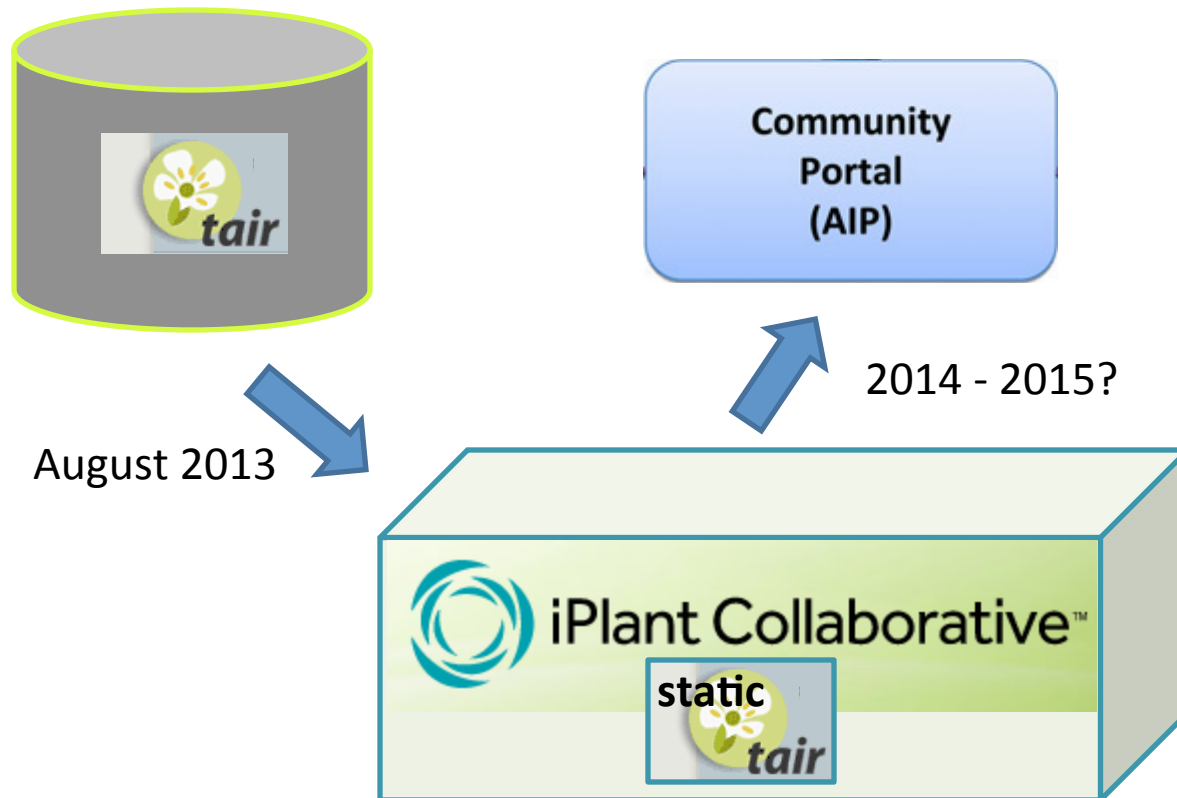
Can we have a new IAIC AIP portal ready in time?



Funding for the TAIR website ends 8/31/2013 – where will Arabidopsis researchers go for data after this?

Can we have a new IAIC AIP portal ready in time?

Fallback option – static TAIR on an iPlant virtual machine?



What would a static TAIR look like?

Available:

- Search pages
- Detail pages
- Genome browser
- BLAST (but data would be out of date)

Not available:

- ABRC stock ordering (will need new ABRC stock database)
- New genes
- New publications
- ICAR abstracts
- Jobs
- Helpdesk



Transition planning

- Is 'static TAIR' the best solution?
 - No links between 'static TAIR' and new ABRC stock database
 - Software failure
 - Stale data
 - No genome authority (locus code chaos)
- Other transition option – 'semi-active TAIR' hosted at iPlant?
 - Maintain ABRC data or links to new ABRC database
 - Gene symbol registration
 - Limited genome updates
 - Gene function data imported from GO
- TAIR assistance with transition
 - Migrate TAIR to iPlant as active or static version
 - Provide expertise on TAIR data and software to new AIP team
 - We are committed to making this as smooth as possible for everyone!

Possible timeline

