

**Barley Coordinated Agricultural Project Work Plan FY06 (3/1/06 – 2/29/07)**  
**Jennifer Kling, Oregon State University**

**1) Describe the research, education, and outreach activities you are planning for the next year (3/1/06 – 2/29/07)**

Research: I will serve as a Data Curator/Validation Coordinator for the project. In the next 12 months, I expect to:

- Work with collaborators to implement protocols and standardize spreadsheets for phenotypic data collection, as outlined in the CAP Participants Guide.
- Review the data as it is received, address any concerns about quality or statistical methodologies, and ensure that annotations to the data are complete.
- Monitor pedigree information for accuracy and consistency.
- Compile all of the genotypic, phenotypic, and pedigree data into appropriate formats for uploading into the database.
- Serve as liaison between the NSF-sponsored Plant Ontology Consortium (POC) and the Barley CAP, to promote development of robust Triticeae ontologies and broader utility of THT.

**List specific outcomes and deliverables that will be accomplished in the first 6 months (3/1 – 8/31). These will be used as benchmarks for your bi-annual progress report.**

- Develop standard spreadsheet formats for data collection with collaborators by April.
- Attend POC workshop on Triticeae ontologies (date to be announced).
- Compile all pedigree data on genotypes submitted by collaborators by May 31.
- Begin to review phenotypic data from trials as it is received in August.

**2) List specific outcomes and deliverables that will be accomplished in the second 6 months (9/1 – 2/29). These will be used as benchmarks for the bi-annual progress report.**

- Continue to review and compile phenotypic data from all trials. Data on disease and agronomic traits should be finalized by Dec. 31. Quality data will be processed as it is received.
- Review and compile SNP data as it is received.

# **Barley Coordinated Agricultural Project Work Plan FY06 (3/1/06 – 9/30/06)**

## **Jennifer Kling, Oregon State University**

### **1) Describe the research, education, and outreach activities you completed in the first half of the FY06 (4/1/06 – 9/30/06)**

#### Research

- I worked with collaborators to develop standardized spreadsheets for phenotypic data collection, as outlined in the CAP Participants Guide. I developed formats for reporting check means and standard errors for each testing site.
- I developed and circulated a list of standardized annotations for data sets, in consultation with staff at GrainGenes.
- I attended a workshop in Ithaca organized by the NSF-sponsored Plant Ontology Consortium (POC), to ensure that trait descriptions used by the Barley CAP are compatible with defined Triticeae ontologies and to promote broader utility of THT. The workshop included hands-on practicals in data curation using Gramene.
- I liaised with Barley CAP breeders and those involved with development of THT and QTL miner to establish a robust system for pedigree input into the THT database. Staff involved with development of TASSEL and GERMINATE (SCRI) were also consulted in this process.
- Pedigree files for all of the OPA2 genotypes were created for uploading into THT. Input of the pedigrees for the 960 CAP lines for 2006 is in progress.
- Data from the 2006 cropping season has just started to come in, for review and uploading to THT.

#### Outreach

- I made a presentation entitled “The Hordeum Toolbox - A public resource for integrating pedigree, SNP, EST, and phenotypic data from breeding germplasm” at the Plant Ontology Consortium Workshop in Ithaca in May.

### **2) List specific outcomes and deliverables accomplished in the first half of FY06 (4/1 – 9/30)**

- Developed standard spreadsheet formats for phenotypic data collection with collaborators.
- Attended a Plant Ontology Consortium workshop in May, and reviewed status of Barley CAP trait descriptions in relation to established Triticeae ontologies.
- Developed system for pedigree data entry and compiled data for the OPA2 genotypes.