

## Pankaj Jaiswal, PhD. Assistant Professor Botany and Plant Pathology Oregon State University, 2082 Cordley Hall, Corvallis, Oregon 97331-2902 Phone +1-541-737-8471 | Fax +1-541-737-3573 | Email jaiswalp@science.oregonstate.edu Web http://www.science.oregonstate.edu/bpp/ | http://www.gramene.org | http://www.plantontology.org

Dated: January 7, 2009

Prof. Pamela Ronald 228 Robbins Hall UC Davis Davis, CA 95616 Email: pcronald@ucdavis.edu

Dear Pam,

I am writing this letter as co-PI of the Gramene database project (<a href="www.gramene.org">www.gramene.org</a>) to collaborate on your proposal to develop a computationally generated network covering the majority of rice (<a href="Oryza sativa">Oryza sativa</a>) genes (RiceNet) and generation of a new proteomics dataset for rice, that you are planning to submit to NSF-PGRP program in January 2009. We think that the results for your validated functional network will be the first of its kind for any crop species and will be broadly useful to many plant scientists seeking to dissect complex plant pathways in many ways by either investigating the rice pathways or those from related species that can be predicted based on the annotations from your project and the genetic colinearity and/or gene orthology.

Based on our understanding the RiceNet project will generate datasets on rice

- -gene functions, phenotypes
- -gene product expression (proteomics)
- -gene networks (predicted and/or confirmed based on metabolomics, co-expression and protein-protein interactions).

We think that Gramene database is well equipped to integrate this information in its curated gene database (preference) and possibly in our rice genome annotation datasets as well. We would also like to add this dataset to GrameneMart for our users, since it is a fairly integrated dataset. GrameneMart is our preferred tool to query the database and build associations between various datasets based on the existing experiments and analysis. A test set is already available from your exiting projects on Rice Kinases [RKD] and Glycosyltransferases [GT]. We are working on integrating them in the Gramene database.

In the process, we will add the interactions inferred by the network trees and program the displayed gene annotations to initiate a webstart of Cytoscape or some other highly recommended network tree display program that is linked to your project website/database. Also, during the tenure of the project we will make an effort to integrate the gene networks and interaction dataset in the rice Reactome and pathways as part of the RiceCyc project.

Gramene will be happy to integrate datasets and analyzed results from RiceNet. We understand that your project will provide datasets in the desired format as and when they are ready for integration in the Gramene database. We will establish a format for data exchange and update project information on a 6-month cycle with links back to your project database. We are pleased to know that unless specified, you will be the primary contact person to work with us on data exchange. We should note that we can only guarantee this arrangement through the end of our current round of NSF funding on the Gramene database project, which is until 09/30/2011.

I wish you luck with your project and look forward to continued collaborations.

Sincerely,

Pankaj Jaiswal