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Prof. Doreen Main
Washington State University
45 Johnson Hall, Pullman, WA 99164-6414
Email: dorrie@wsu.edu

Dated: January 15 2009

Dear Dorrie,

I am writing this letter as co-PI of the Gramene database project (www.gramene.org) and leader of the Plant Ontology Project (www.plantontology.org), to collaborate on your proposal "Genome Database for Rosaceae (GDR)" that you are planning to submit to the NSF. We think that the continued development of GDR as a community resource will be of immense value to the Rosaceae researchers and plant biologists in general. It will also be broadly useful to many researchers seeking to dissect complex traits and gene functions in speciality crops from Rosaceae or those from other model and crop plant species that can be predicted based on the annotations from your project and the genetic colinearity and/or gene orthology.

Based on our understanding besides many other specific goals of the project, you would like to specifically collaborate with us on:

- Sharing the curated dataset on functional annotation of Rosaceae
 - Genes and gene products
 - Phenotypes (mutants and QTL)
 - Expression datasets (transcriptome and proteome)
- Assign ontology associations to GDR datasets

We think that Gramene database and Plant Ontology projects are uniquely designed to meet the requirements of this collaboration. Based on our understanding we will make an effort to mirror the above datasets in the curated gene and ontology database section of Gramene and provide the same in the GrameneMart. GrameneMart is our preferred tool to query the database and build associations between various datasets based on the existing experiments and analysis. We will also mirror the same datasets in the PlantGeneWiki being developed by us. The PlantGeneWiki will serve as a community curation tool and we will be happy to collaborate on this project by inviting GDR as stakeholder for Rosaceae genes.

In addition to these collaborative efforts, we will mirror the ontology associations in the Plant Ontology project database as well. We also understand that during the tenure of this project we would need to add new terms to the gene, plant and trait ontologies to better suit the Rosaceae needs. Therefore, we would like to mention that we have the necessary resources and support to undertake this responsibility and would like to establish a Rosaceae working group on plant ontology development. With your help this group will guide the Rosaceae specific ontology needs and yet remain generic enough to be applicable to all plants for comparative analysis. By this time we all know the how important is the development and integration of the common use ontologies in annotation of various species/clade specific datasets on gene function, expression and phenotypes. This integration not only helps in common use of the language but also helps in cross database querying and comparative analysis of genomic and phenotype datasets.

We also understand that your project will have the necessary bioinformatics support and will provide us the datasets in the desired formats as and when they are ready for integration in the Gramene and Plant Ontology databases. 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.

Based on our discussion, I will be happy to serve on the project's advisory board, provisional to project getting funded.

I wish you good luck with the project and look forward to work on this collaboration.

Sincerely,

Pankaj Jaiswal