

Cold Spring Harbor Laboratory

Doreen Ware, Ph.D. USDA ARS Adjunct Assistant Professor

January 17, 2008

CJ Tsai Professor School of Forestry and Natural Resources & Department of Genetics University of Georgia cjtsai@warnell.uga.edu

Dear CJ.

I write to confirm the willingness of the Gramene team to collaborate with you on your NSF proposal, entitled "Alternative Splicing and Nitrogen Stress Response in a Populus Hybrid Family".

Your plan to use next-generation sequencing technologies for global analysis of alternative splicing in stress transcripomes of a Populus hybrid family should yield informative data toward understanding regulation of alternative splicing in woody perennials. As you are aware, Gramene currently maintains a Populus trichocarpa genome browser built on the Ensembl platform. It supports orthologue mapping and comparative genomics analysis with other plant genomes hosted at Gramene, using Ensembl's Compara and Blastz-chain-net pipelines. Hosting alternative splice variation information derived from you project will be a benefit of the larger plant community.

Although Gramene's primary focus is on the grasses, inclusion of dicots, such as Arabidopsis, Populus and Vitis has been valuable for comparative genomics and for phylogenetic analysis. For this reason, we are most happy to assist your team with the effort. We will work with your bioinformatics staff and postdoc on necessary data formatting and coding for populating RNA seq, data generated from your project onto the Gramene genome browser, and advise your team on setting up your local Ensembl genome browser.

I understand that you anticipate generating the Illumina transcriptome data, by the end of the first year, from 4 different Populus genotypes subjected to varying levels of nitrogen stress. Ensembl is developing the infrastructure to store and visualize summary information for RNA seq. data and we anticipate that the first year while the data is being generated, we can use the available time setting the ground work using available preliminary data, and developing a data processing pipeline in anticipation of the large data sets.

We are pleased to learn that the Gramene resources have been helpful to your poplar research, and we look forward to a productive collaboration. Please beware the Gramene project is currently funded until the October of 2011 and at this time can only guarantee access to the data until that time.

I wish you the best of luck with your submission.

Sincerely,

Doreen Ware

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