AGI Participation in other public projects

RED CLOVER GENOMICS:
Project title: Using translational genomics to underpin germplasm improvement for complex traits in crop legumes
(http://www.erapg.org/publicfiles/16893_1_Abberton-Donisson.pdf).

Funded through: ERA NET PLANT GENOMES. Investigators: Michael Abberton, IGER; Leif Skøt, IGER, UK; Iain Donnison, IGER, UK; Giles Oldroyd, John Innes Centre, UK; Rene Geurts, Wageningen University, The Netherlands; Klaus Mayer, GSF – National Research Center for Environment and Health GmbH, MIPS Institute for Bioinformatics, Germany.

AGI is construction 2 BAC libraries, and Fingerprinting and end sequencing 3 BAC libraries for assembly of a 12x physical map and collaborative alignment to Medicago. These libraries are available to the public.

EUCALYPTUS GENOMICS:
Project title: Brazilian Network of Eucalyptus Genome Research, ie: GENOLYPTUS Project, http://www.ieugc.up.ac.za/news_genolyptus_25may2006.htm ,

Funded in collaboration with JGI. Dario Grattapaglia; EMBRAPA Genetic Resources and Biotechnology, Brasilia, Brazil.

AGI is constructing 2 BAC libraries and fingerprinting 5x of each library and providing libraries to JGI for downstream sequencing. These libraries are available to the public.

AMBORELLA GENOMICS:
This is part of a larger project title: The Ancestral Angiosperm Genome Project, Funded by NSF: 0638595, Claude dePamphilis, Pennsylvania State University., USA.

AGI is BAC end sequencing and Fingerprinting a previously made Amborella BAC library, assembling a physical map, assisting in the selection of loci specific BAC clones and sequencing the loci specific BAC clones. The BAC library is available to the public.

BARLEY GENOMICS:
Project title: Genomics-assisted dissection of barley morphology and development (BARCODE)

Robbie Waugh, Scottish Crop Research Institute, and Nils Stein, Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany.

Funded as part of ERA NET Plant Genomes (http://www.erapg.org/publicfiles/16893_21_Stein.pdf).

This project also is sharing data into another barley project: http://www.public.iastate.edu/~imagefpc/IBSC%20Webpage/IBSC%20Template-home.html .

AGI is BAC end sequencing rearrayed BAC clones of a Morex BAC library that will begin to elucidate the gene space of barley. The BAC library is available from CUGI to the public.

POPLAR GENOME RESOURCES:
This data will feed into the Bioenergy Science Center (BESC) project at Oak Ridge National Laboratory (http://bioenergycenter.org/), and to part of the International Populus Genome Consortium (http://www.ornl.gov/sci/ipgc/) will specifically be used for identification of bio-energy related traits. JGI Poplar site: http://genome.jgi-psf.org/Poptr1_1/Poptr1_1.home.html). Also in collaboration with: Len Pennacchio & Jerry Tuskan, at JGI and Steve DiFazio West Virginia.

Funded through JGI.

AGI is producing 2- 20x genome coverage BAC libraries, two parents of a mapping population, to be end sequenced at JGI. These libraries will be available to the public.

MELON EST GENOMICS:
Project title: Understanding the climacteric vs non-climacteric fruit ripening mechanisms in melon using transcriptomic, metabolomic and reverse genetic approaches (MELRIP).

This is part of the ERA NET Plant Genome funding

(http://www.erapg.org/publicfiles/16893_14_Garcia-Mas.pdf). Jordi Garcia-Mas, Departament de Genètica Vegetal Laboratori de Genètica Molecular Vegetal, (Barcelona), Spain and Ralph Dean NC State. This data will also be part of the International Cucurbit Genomic Initiative (ICGI) http://www.icugi.org/ .

AGI is end sequencing and submitting to genbank melon ESTs sequences.

For questions concerning these projects, please contact Dave Kudrna (dkudrna@ag.arizona.edu).