

Oregon State University

The Barley CAP is a central focus of the Oregon State University Barley Project. They are involved in a number of areas of CAP endeavor.

Patrick Hayes, in addition to managing the Oregon State University barley breeding and genetics program, serves on the CAP Executive Committee and is a co-leader of Objectives 1, 3, and 4. He is also the Coordinator of the US Barley Genome Project (USBGP). Direct involvement in the CAP and the USBGP ensures full integration and synergy of the two projects.

Dr. Jennifer Kling (Research Associate Professor) and Dr. Peter Szucs (Research Associate) are funded by the CAP and have primary responsibilities for data management and mapping, respectively. Jennifer recently participated in a Gramene workshop on trait ontology and is ensuring that the Barley CAP phenotype data will be fully interpretable with the universal ontological vocabulary. Peter will be integrating his expertise with winter hardiness genetics into the CAP effort, since the focus of our breeding component is winter habit barley.



Standing (left to right) Peter Szucs, Jennifer Kling, Pat Hayes, Juan Rey. Seated left to right) Ann Corey, Kelley Richardson, Tanya Filichkin, Phinyarat Kongprakhon.

Because the CAP is all about integrating breeding and genetics, other project members are also involved with the endeavor, although not directly funded by the CAP. Ms. Ann Corey (Senior Faculty Research Assistant) is responsible for field and greenhouse aspects of the program and

has taken responsibility for integrating our winter malting breeding program with the CAP. Ms. Tanya Filichkin (Senior Faculty Research Assistant) is responsible for lab management and, together with Peter Szucs, managed the pre-award allele re-sequencing effort. She subsequently managed the assembly of the CAP Core germplasm set, DNA extractions, and transfer of DNA for Illumina and DArT profiling. Ms. Kelley Richardson is wrapping up her Ph.D. thesis research involving characterization of resistance phenotypes in near-isogenic lines developed via marker-assisted introgression of different numbers and types of stripe rust resistance genes. Mr. Juan Rey is starting his M.S. thesis research – he will be using MAS to develop winter habit barley for human nutrition. Ms. Phinyarat Kongprakhon is a visiting scholar from Thailand: she is writing up the results of multi-location assessment of MAS-derived stripe rust resistance QTL pyramid lines and will be conducting a comparative analysis of stripe rust and rice blast resistance QTL in barley and rice.