GREAT Trees

Genetic Research on Engineering + Advanced Transformation of Trees

Cooperative Research

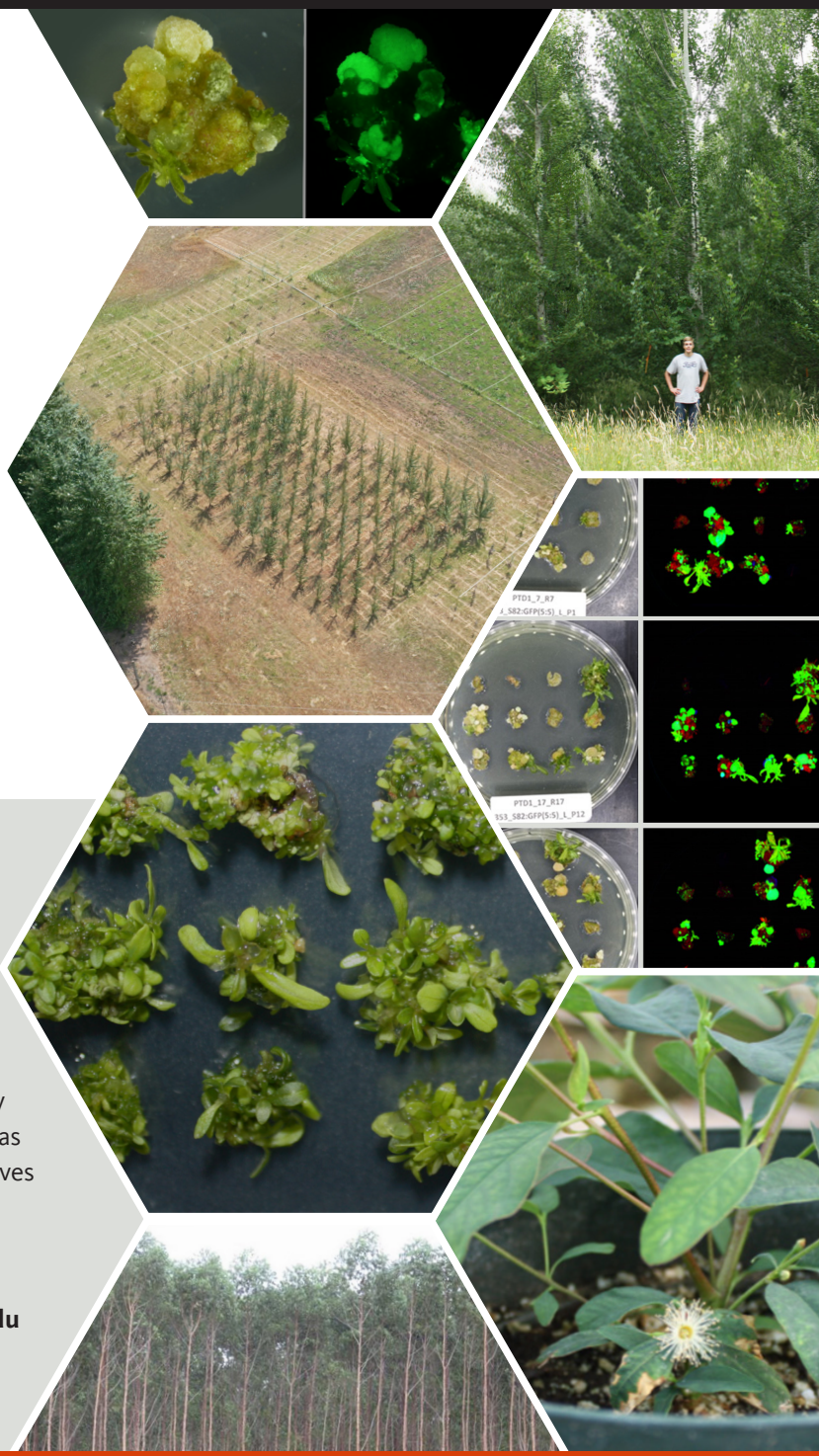
Our work is focused on innovations in gene transfer and gene editing technology to make use of these methods faster, less costly, and with fewer obstacles to commercial use. Our work emphasizes the use of novel morphogenic-regulatory genes and Agrobacterium strains, applied using both tissue-culture-free (*in planta*, greenhouse) and laboratory-based (*in vitro*, Petri dish) systems.

We also study graft-based methods to induce rapid flowering that can speed conventional and genomic breeding, and the introgression of transgenes or edited genes into commercial plantations. To reduce ecological impacts, aid hybrid breeding, and promote social acceptability of exotic and genetically modified plantation trees, we develop means for genetic containment and male-sterility.

Cooperative Leader

Steve Strauss
is a University Distinguished Professor of Forest Biotechnology at Oregon State University. He has led university-industry cooperatives focused on forest biotechnology for 30 years.

steve.strauss@oregonstate.edu
(+1) 541-760-7357



Oregon State University

COOP WEBSITE BACKGROUND RESEARCH PLANS