# THE GENOMES OF GIANTS: A COMPARATIVE WALK THROUGH THE FOREST OF TREE GENOMES

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In the past decade, significant advances in the genetics and genomics of fruit and forest trees have led to the development of the tree genome models. These models are currently being exploited to uncover the genes and gene networks that control the myriad of important traits that define our tree resources. To often however, the significant advances in one species are not rapidly translated to other species due to the lack of our understanding of the structural and functional genomics similarities and differences among species in different families. Comparative genomics analyses provide the avenue to explore the evolution of tree genomes often providing details of genes and gene networks that impact characters important to both the forest and fruit tree sustainability. In this presentation the application of such comparative strategies will be presented in the context of characters that significantly impact the fruit and forest tree industries and examples of the cross species utility of the model genomes for candidate gene discovery will be provided as a roadmap for advancing our understanding of tree genetics.