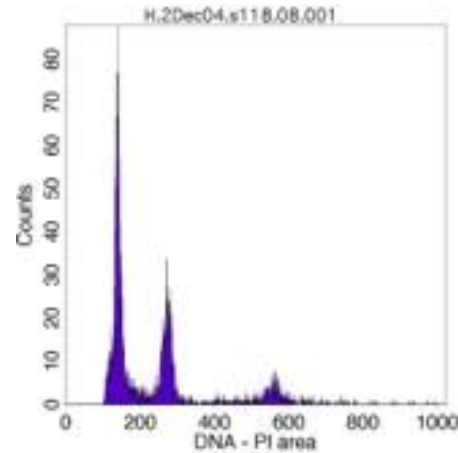


Brian Husband - University of Guelph

Polyploidy, phenotypic divergence and speciation: challenging the instantaneous divergence model?



The depiction of polyploid speciation as instantaneous implies that strong prezygotic and postzygotic isolation form as a direct result of whole-genome duplication. However, the direct and indirect contributions of whole genome duplication to phenotypic divergence and reproductive isolation are rarely quantified across multiple reproductive barriers. In this seminar, I will present three facets of our research on this topic. I will describe the immediate effects of whole genome duplication on reproductive isolation in fireweed (*Chamerion angustifolium*) using synthetic polyploids and then describe the magnitude and direction of selection in mixed ploidy populations. Finally, I will provide some preliminary results on the genotype-dependent effects of whole genome duplication in *Arabidopsis*, which can influence how instantaneous polyploid speciation can be. This work is a synthesis of new and old work that will challenge some of the standard conceptions of polyploid evolution.

Friday, October 28, 2016; Room 307, SERF; 3:30 - 4:30PM. Pre-talk reception: 3:00 PM in Dabney 568