

# Biology Seminar



Western  
UNIVERSITY · CANADA

12:30 - 1:30 pm  
Friday, March 4, 2022  
Via ZOOM



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## Retention and Reactivation of Ancestral Developmental Potentials

Recurrent phenotypes are widespread throughout nature as a result of convergence. We have begun to accumulate a great deal of knowledge regarding the ecological context and selective forces involved in facilitating these evolutionary patterns. Nevertheless, the extent to which these patterns are the product of novel developmental processes or the redeployment of ancient developmental programs remains poorly understood. With several examples, I will show that the potential for the reactivation of latent developmental programs can be retained for millions of years. More generally, ancestral developmental potentials persist throughout the animal kingdom and may facilitate the parallel and adaptive evolution of phenotypes.

