



The Philosophy Department
cordially invites you to attend
a presentation by

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**“Does Greater Unification Lead to
Better Predictions? The Case of
Invasion Biology”**

Friday, March 6, 2015

4:00-5:30 pm — 202C O’Dowd Hall

Abstract: Biological invaders can threaten native ecosystems and global biodiversity, incur massive economic costs, and even introduce diseases. Invasion biologists generally agree that being able to predict when and where an invasion will occur is essential for progress in the field of invasion biology. However, successful predictions of this type remain elusive. While many seek predictive power via conceptual unification, I do not think that a unified theoretical framework will lead to better predictions. I argue that because the causes of invasion phenomena are exceedingly complex and heterogeneous, it is impossible to generalize over particular events without sacrificing causal detail. However, this causal detail is precisely what is needed for the precise predictions that the scientists wish to produce. Instead, I show that integration (of data and methods) rather than conceptual unification is a more useful tool for generating successful predictions. One important implication of my view is that it points to a more pluralistic approach to invasion biology, where unification and prediction are treated as important but distinct research goals.