



***Maud Menten Institute /
Mathematical and Statistical Biology Seminar***

Monday, Dec 1, 2025

2:00pm CT

University of Manitoba – 225 St. Paul's College

-or-

[Join Zoom meeting](#)

Meeting ID: 699 6049 3994

Passcode: 900153

Jeremy Fox

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Biological Sciences

University of Calgary

**Gambling for resurrection: environmental fluctuations can
reduce extinction risk for highly at-risk populations**

Random fluctuations in environmental conditions (environmental stochasticity) are thought to increase population extinction risk. But as gamblers, politicians, and sports teams know, even bad risks become good risks when you are facing imminent defeat ("gambling for resurrection"). Analogously, populations at high risk of imminent extinction can benefit from environmental fluctuations that create some chance of long-term persistence. I will illustrate this principle with mathematical models, an experiment with *Daphnia*, and analogies to poker, hockey, and the movie *Wag the Dog*.

In Victoria: Attend the UVic watch party (12pm PT) Clearihue A-317

In Edmonton: Attend the UofA watch party (1pm MT) UComm 4-450