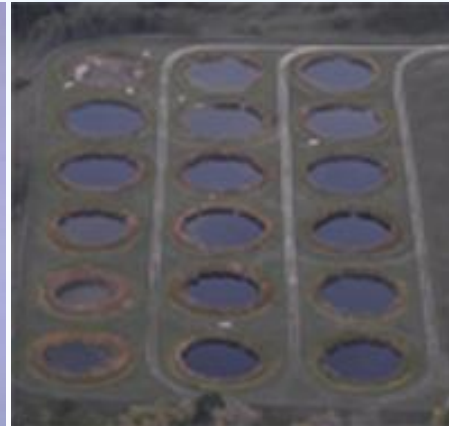
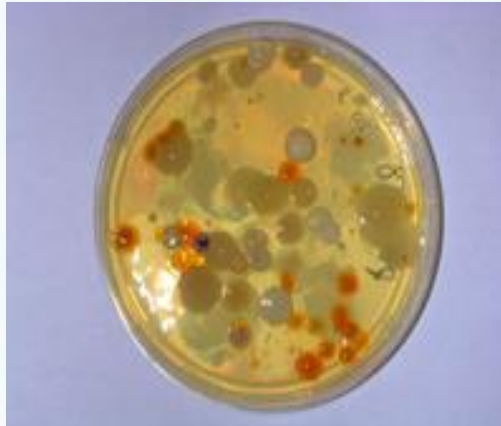


Jay Lennon - Indiana University



Microbial seed banks: the ecological and evolutionary significance of dormancy

Dormancy is a bet-hedging strategy used by a wide range of taxa, including microorganisms. It refers to an organism's ability to enter a reversible state of low metabolic activity when faced with unfavorable environmental conditions. Dormant microorganisms generate a seed bank, which comprises individuals that are capable of being resuscitated following environmental change. Thus, microbial dormancy may help maintain biodiversity and influence the stability of ecosystem processes. After introducing a theoretical framework for microbial seed banks, I will present results from a meta-analysis on the prevalence of dormancy in a variety of ecosystems, including oceans, lakes, soils, and the human gut. In addition, I will discuss results demonstrating the importance of dormancy for the maintenance of microbial diversity and ecosystem functioning, along with new work investigating the potential for rapid evolution of microbial dormancy, communication-control of dormancy among diverse microbial taxa, and the effects of seed banks on biogeochemical cycles.

Friday, Oct. 10, 2014; Room 307, SERF; 3:30 - 4:30PM. Pre-talk reception: 3:00 PM in Dabney 568