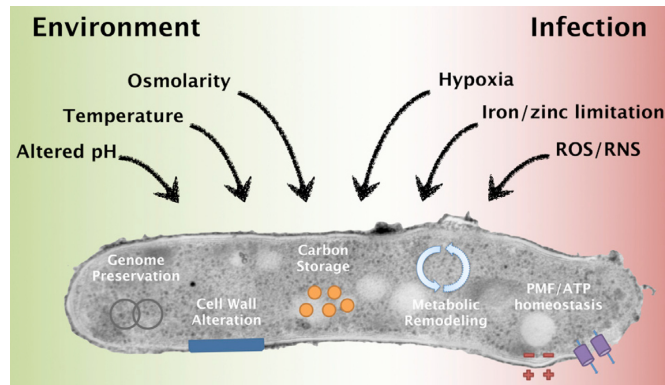




It Takes Two to Tango: both host and pathogen contribute to tuberculosis disease



M. tuberculosis infection leads to a variety of outcomes; from lifelong containment of the infection to progressive inflammatory disease. The outcome of TB treatment is similarly variable. At the most fundamental level, two factors underlie both the progression of disease and the efficacy of treatment. Firstly, the rate of bacterial growth determines the extent of direct tissue damage and the activity of many antibiotics. We have found that the rate of bacterial growth is determined by active stress responses that can be manipulated to enhance antibiotic efficacy. Secondly, the strength and character of the inflammatory response elicited by the persistent presence of the pathogen determines the extent to which disease progresses.

Dysregulation of these tissue-damaging responses could underlie the pathogenesis of tuberculosis, as well as many other chronic infections.

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Host: Dr. Alex Ensminger

Date: Monday November 25, 2013

Time: 4:00 p.m.

Place: FitzGerald Building
150 College Street
Room 103