GEORGE MASON UNIVERSITY COLLEGE OF SCIENCE DEPARTMENT OF BIOLOGY SEMINAR Fall 2016

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"How to Fail as an Epidemiologist: Finding Significance in Statistical Insignificance"

In biostatistics, a p-value of p<0.05 indicates statistical significance because it allows the analyst to reject the null hypothesis. When p>0.05, the researcher fails to reject the null hypothesis and must conclude that the initial hypothesis was incorrect. But a lack of support for a particular hypothesis doesn't mean that a research project was worthless. Null results can advance science, too, and sometimes unexpected results are valuable. This non-technical presentation will introduce the field of infectious disease epidemiology and use examples from Dr. Jacobsen's research in Ecuador, Sierra Leone, and other sites to highlight lessons learned from "failed" studies.

> TUESDAY October 25, 2016 3:00-4:15 PM Innovation Hall Room 131