



Department of Biostatistics

BIOSTATISTICS SEMINAR

Autism and Vaccines: How Bad Science Confuses the Press and Harms the Public

Steven L. Salzberg, Ph.D.

Director, Center for Bioinformatics and Computational Biology

Horvitz Professor of Computer Science

University of Maryland, College Park

ABSTRACT

Ten years ago, an article appeared in the medical journal *The Lancet* that suggested a link between autism and the vaccine for measles, mumps, and rubella. The article was widely discussed in the popular press in England, and vaccination rates began to fall. Further investigations revealed that the study had serious flaws: the data had been manipulated and the principal scientist had a major conflict of interest, with the result that 10 of his 12 co-authors repudiated the study's findings.

Numerous scientific studies since 1998, all done in response to the original *Lancet* article, have failed to find any link between autism and vaccines. Despite this, a number of activists, including a small number of scientists and doctors, continue to push the connection, often accompanying their claims with promises of "alternative" treatments for autism. The press keeps the issue alive by reporting "the controversy," often accompanying their reports with emotional testimonials from parents, including several celebrities. As a consequence of this publicity, vaccination rates have been falling in England, the United States, and elsewhere, leading to alarming new outbreaks of diseases.

This talk will present a scientist's view of the vaccine-autism controversy, including a look at the role of the media and a review of some of the studies done to address the questions raised. One lesson to draw from the experience of the past ten years is that scientists and doctors need to work harder to educate the public, so that vaccines, one of the greatest medical successes in history, remain an effective tool in our fight against disease.

**The Johns Hopkins Bloomberg School of Public Health
Department of Biostatistics, Wednesday, September 30 2009
Room W2030 School of Public Health, 4:00-5:00pm (Refreshments: 3:30)**

For disability access information or listening devices, please contact the [Office of Support Services](#) at 410-955-1197 or on the Web at www.jhsph.edu/SupportServices. EO/AA