

How to Beat Science and Influence People

In their recent book *Merchants of Doubt* (Bloomsbury, 2010), Naomi Oreskes and Eric Conway describe what they call the "Tobacco Strategy", which was the strategy used by the tobacco industry to influence policy makers regarding the health risks of tobacco products. The strategy involves two parts: on the one hand one emphasizes independent research results that favor the industry's preferred conclusion; on the other, one funds additional research, but selectively publishes the results. Similar methods have subsequently been used, in many cases by the same industry consultants, to undermine research on a variety of topics, including the effectiveness of space-based anti-ballistic-missile systems, the risks and causes of acid rain, and the threat of global climate change. In this talk I will discuss a model of the tobacco strategy, and use it to argue that both prongs of the tobacco strategy can be extremely effective -- even when policy makers rationally update on all evidence available to them. As I will elaborate, industry propagandists are especially effective when scientists deal with evidence that is ambiguous, or when they run low powered studies.