

**Health Maintenance Consortium  
Seventh Grantee Meeting  
March 19-20, 2007**



**Keynote Speaker  
David MacKinnon, PhD**

presents

**Introduction to Statistical  
Mediation Analysis**



David MacKinnon is a professor of psychology at Arizona State University. He received the Ph.D. in measurement and psychometrics from the University of California, Los Angeles in 1986. From 1986 until 1990, he was an Assistant Professor of Research in the Department of Preventive Medicine at the University of Southern California. He is director of the Research in Prevention Laboratory at Arizona State University. Since 1990, Dr. Mackinnon has received continuous federal funding for substantive and statistical research.

His substantive research focuses on prevention especially interventions to reduce drug abuse and improve health. Some of this work has included evaluations of the alcohol warning label, raising the minimum drinking age, and community and school-based drug prevention programs.

Dr. MacKinnon conducts research on statistical methods in prevention research. A primary part of this research is the development and evaluation of methods to assess how prevention and treatment programs achieve their effects. This research, funded by the National Institute on Drug Abuse, is the focus of the workshop. Most interventions are designed to change mediating variables such as norms and social support that are thought to lead to beneficial changes in outcome variables. Mediation analysis is a method to assess program effects on mediating variables, the relation of the mediating variable to the outcome, and the extent to which the change in the mediator led to the change in the outcome. Mediation analysis provides a way to test underlying health behavior theory and provides information to make programs more efficient.

Dr. MacKinnon is the author of a forthcoming book entitled, "Introduction to Statistical Mediation Analysis."