

# Communicating Science in an Era of Mass Communication

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*“When assessing the risks and benefits of new technologies, scientists and engineers should account for the non-technical and value-based concerns of the public in addition to technical concerns.”*  
*(Mooney 2010)*

We are in an era of rapidly changing communication media that requires a marked evolution in the modes of communicating science. Scientists are required to assume increasing responsibility for translating their scientific findings and calibrating their communications to non-technical audiences, a task for which they are often ill prepared, especially when it comes to controversial societal issues such as tobacco, evolution, and most recently climate change. Such issues can be highly politicized and prone to being hi-jacked by ideological belief systems, often to the detriment of constructive dialogue.

If we start from a sound scientific finding with general scientific consensus, then the primary emphasis moves from the *science* to the *art* of communication. This art must address a number of factors that influence community decisions from the policy to the personal level, including: immediacy, economics, culture, community leaders and elders, emotional conditions, and ideological filters. The art cannot have free reign, however, as there remains a strong science requirement for objectivity, honesty, consistency in message, and a resistance to advocating particular policy positions.

I will discuss approaches to enhancing communication, including the current state of communication science and the developing approaches that UCAR and NCAR are developing towards enhancing our capacity in this area.

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<sup>1</sup> This discussion paper provides a view of issues related to improving communicating science, developed to aid discussion at a workshop to be held at NCAR 21-22 October 2010. It is a personal view and does not necessarily reflect any UCAR or NCAR position.