

David H. Guston

“Anticipatory Governance and Responsible Innovation at CNS-ASU”

The NSEC/Center for Nanotechnology in Society at Arizona State University (CNS-ASU) has pursued a strategic vision of anticipatory governance that has helped it develop a set of capacities in *foresight* and anticipatory methods, public *engagement* with emerging science and technology, and socio-technical *integration* across disciplinary boundaries. The Center has deployed these capacities to encourage a more self-aware, *reflexive* approach to conducting nano-scale science and engineering research. CNS-ASU’s vision of anticipatory governance is closely related to the concept of responsible innovation (RI), which has become popular in particularly European policy circles but also in the United States and other nations around the world. This presentation will briefly describe the relationship among the US National Nanotechnology Initiative’s strategic goal of “responsible development,” the generation of CNS-ASU’s vision of anticipatory government and its new activities around RI, and the uptake of responsible innovation in Europe. It will also describe two recent research achievements related to RI: our Futurescape City Tours, which provide a new model for combining foresight and engagement activities; and anticipatory life cycle assessment (aLCA), which results from the *integration* of anticipatory perspectives into LCA techniques for the promotion of greater reflexivity and responsible innovation in the development of nanomaterials.

In addition to directing CNS-ASU, Guston is co-director of ASU’s Consortium for Science, Policy and Outcomes and professor of politics and global studies. He has recently become the founding editor-in-chief of the *Journal of Responsible Innovation*.