

Policies that predict and direct innovative research might seem to be a practical impossibility, says **David H. Guston**, but social sciences point to a solution.

In some respects, *innovation policy* can be regarded as an oxymoron, a figure of speech that combines two contradictory terms (ever take a *working vacation*?). A key tension is that policies come too late to affect the past that necessitated them, but too early to understand the future they are supposed to shape.

Anticipatory governance averts the inherent contradictions of innovation policy, helping to ensure that "innovation policy" doesn't become just another "jumbo shrimp."



# *Innovation Policy: Not Just a Jumbo Shrimp.*

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In the August 21, 2008 *Nature* 454 Commentary, CNS director David Guston proposes **anticipatory governance** as the solution, an approach that retains an element of revolutionary thinking yet steers policy towards goals that are arrived at prudently and democratically.

Anticipatory governance:

- Encourages public engagement with the scientific enterprise during all stages of research and development, introducing discussions of values and ethics;
- Relies on scenario-based visions of the future for the anticipation, rather than the prediction, of socio-technological change;
- Fosters the integration of social science and humanistic scholarship with science and engineering research to raise attention to societal values in the conduct of laboratory research.

The Center for Nanotechnology in Society at Arizona State University is pioneering anticipatory governance through engagement, anticipation and integration activities with nanoscale scientists and engineers. While anticipatory governance is not widely nor uniformly practiced, it has important potential as a creative instrument of innovation policy.

(For information about how to access the entire article, visit <http://www.nature.com/nature/journal/v454/n7207/full/454940a.html>)

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