

Dr. Erik Fisher, Assistant Professor
School of Politics and Global Studies
Arizona State University

Around the world, science policies are calling for “integration” to address broader societal dimensions of science research in ways that have the potential to influence both the process and the products of such research. Despite such calls, neither the capacity of laboratories to respond to them nor the role that “socio-technical” collaborations may play in enhancing such responsiveness is well understood.



Accordingly, the STIR (Socio-Technical Integration Research) project embeds social and human scientists in 20 labs across ten nations on three continents to investigate these questions. Social researchers learn the theory and observe the methods of their laboratory counterparts, but they also

introduce a protocol that unpacks social and ethical dimensions of the lab science itself in a real-time, hands-on collaborative manner.



Responsible Innovation: Integrating the Social and Natural Sciences in Laboratories around the World



The methods and inquiries of the social scientists become embedded in the laboratory during each engagement study. This process is more fully described at <http://cns.asu.edu/stir/>.

Integrative activities can trigger changes in laboratory practices, whether by expanding the values and questions researchers consider or by informing material practices themselves.

For example, reflections on responsible innovation generated novel ideas for antenna structures and nanoparticle synthesis for researchers at Arizona State University's Center for Single Molecule Biophysics. Moreover, such inquiries often advance deliberation on public values.



For laboratory scientists, thinking and talking about the broader dimensions of their work in an integrated way need not entail a sacrifice in productivity. Rather, efforts to enhance both scientific creativity and societal responsiveness can be mutually reinforcing.

