## enLIGHTeNING Lunch

Future of Innovation in Society

Arizona State University

a lunchtime talk series sponsored by the School for the Future of Innovation in Society

## Sam Evans & Megan Palmer

Wednesday, December 6, 2017 12 p.m. - 1 p.m. Coor 5536, ASU Tempe Campus

## Science governance through anomaly-handling: the case of gene drives

Decisions about the development and use of gene drives are framing broader debates about the need for fundamental changes to biotechnology regulatory systems. We summarize this debate and describe how gene drives are being constructed as potential anomalies within the regulatory landscape. Drawing on literature from science and technology studies and other fields, we outline a broad set of anomaly-handling strategies and provide examples from current gene drive debates. While often couched in technical terms, decisions about how to address anomalies are also decisions about whether to strengthen or weaken different forms of governance. By exploring the different ways that anomalies are constructed and handled, we highlight the active role that anomalies play within a changing governance system, and invite a more nuanced examination of the multifarious goals these strategies serve.

Pizza will be served. Please RSVP to bit.ly/2m22UIO

synthetic biology.

Sam Weiss Evans is an Assistant Research Professor in the Program for Science, Technology, and Society at Tufts University and a Research Fellow at the Program on Science, Technology & Society at Harvard University. His research focuses on the construction and governance of security concerns in emerging technology, and has for the last several years focused on synthetic biology and geoengineering. Trained in Science and Technology Studies, he explores concepts of ambiguity, ignorance, and legitimacy in democratic governance of science and technology.

Megan J Palmer is a Senior Research Scholar at the Center for International Security and Cooperation at Stanford University. She leads a research and practice program on risk governance in biotechnology and other emerging technologies. Her current projects focus on the governance of dual use research, the diffusion of safety norms and practices, and the security implications of alternative technology design decisions. Trained as a biological engineer, she previously spent 5 years co-directing the policy-related research and activities of a multi-university research center in



