Taking care of security in synthetic biology research

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Learning from History?
The Past and Future Implications of Scientific Developments for the BWC
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History and Contemporary Policy

○ History as a 'template for action';

○ Showing what policy alternatives were considered in the past;

○ Providing a 'voice' for alternative or silenced perspectives;

○ Unpicking 'myths' or 'folk histories';

○ Showing the policy-making process in action;

○ Showing how taken-for-granted ideas or concepts might have been differently interpreted or understood;

○ Showing 'what happened' and providing greater general understanding

Ways of 'taking care' of security

1. Getting biosecurity 'done' and out of the way

2. Attending to and 'caring about' biosecurity concerns

3. Being 'careful' in our assumptions about the science and organizational structures of the biosecurity governance system

1. Getting biosecurity out of the way

○ Checks at different stages of research (e.g. proposal, approval, publication)

○ Using 'secure' technologies/organisms

○ Delegating responsibility (e.g. biosafety officers, lab heads)

○ Codes of Conduct

These work as long as there are no surprises

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2. Caring about biosecurity

○ Building 'secure' organisms (e.g. kill switches, special environments)

○ Performing risks assessments (e.g. current Sloan work)

○ Education and training

These work as long as assumptions about science and organizations still hold

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3. Being careful in the assumptions of biosecurity

○ Analyze how security discourse ostracizes other framings of concerns (e.g. Rabinow & Bennett 2012)

○ Developing protected spaces to analyze assumptions (e.g. Wilson Center/MIT environmental work; gene drives)

○ Challenging 'Myths' (Jefferson et al 2014, Vogel 2013)

These only have effect if states provide legitimacy to their findings and reformations

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Points to remember

○ 'Taking care' of biosecurity can mean: 1) getting it done; 2) attending to it; and 3) assessing its assumptions

○ All three types of taking care of security are needed, and the first two are well-supported

○ Need to improve support to reflect on and modify assumptions about what counts as a concern, and what are acceptable ways of taking care

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