Biological Futures

in a GLOBALIZED WORLD

Spring Quarter 2013 Colloquium Series

New Belmont:

Knowledge, Power, and the Ethics of Biological Security

Monday, May 6, 12:00 - 1:30 pm

Simpson Center for the Humanities, Communications 202
Lunch will be provided; please RSVP to suzelong@uw.edu by **Thursday, May 2** to be sure you get the sandwich of your choice!

Gaymon Bennett and **Roger Brent**, Center for Biological Futures Fred Hutchinson Cancer Research Center







Brent

A key aspect of the 21st century biosecurity landscape is a continuing increase in the ability of small groups and individuals to make, by recombination, synthesis, and directed evolution, new replicating organisms. This empowerment of individuals and groups is, of course, driven by the continuing increase in scientific knowledge and technical capability, the spread of this knowledge and capability, and the lowering of barriers to access it and make use of it. This increase in capacity, and the difficult questions it raises for the ethics and governance of science, was exemplified by the controversial synthesis and evolution of the H5N1 influenza virus to make it transmissible among mammals.

Using this controversy as a point of reference, and taking a cue from the monumental "Belmont Report" on human subject's research, this colloquium poses the question of what new strategies are needed for understanding and critically engaging the knowledge, power, and ethics of contemporary biological security. What, empirically, do we need to know about the state-of-the-art in advanced biological research? How do we position ourselves to track research in its scientific, political and commercial dimensions? What ethical equipment is already at play in the conduct and governance of research and how might it need to be reworked? And how might biologists, humanists, policy makers and others collaborate in answering these questions?

Please see the following page for the presenters' bios and recommended readings.

New Belmont: About the Presenters

Gaymon Bennett is a Senior Research Fellow at the Center for Biological Futures in the Basic Sciences Division, Fred Hutchinson Cancer Research Center. Previously, Dr. Bennett helped create and develop the "human practices" component of the multi-university Synthetic Biology Research Center (SynBERC), and was the human practices lead at the Berkeley-led BIOFAB. He is the coauthor of *Designing Human Practices: An Experiment with Synthetic Biology*, and *Sacred Cells? Why Christians Should Support Stem Cell Research*. He holds a PhD in sociocultural anthropology from UC Berkeley and a second PhD in philosophical theology from the Graduate Theological Union, Berkeley.

Roger Brent is a member of the Basic Sciences Division, Fred Hutchinson Cancer Research Center. His highly interdisciplinary studies use single cells as model systems and focus on how cell signaling pathways represent and transmit information. This work may have particular relevance to cancer, since abnormal signaling plays a role in cancer development. His research draws on molecular biological methods, genetics and computational biology, and has led to the development of a number of innovative technologies for understanding quantitative cell behavior that have utility for addressing wider biological problems. Before joining the Hutchinson Center faculty in 2010, Brent was director and research director of the Molecular Sciences Institute in Berkeley, Calif. Brent is the inventor of 12 issued patents and several pending patents and has also been a longtime adviser to the biotechnology and pharmaceutical industries, as well as to various U.S. federal agencies.

New Belmont Background readings

Available online at https://catalyst.uw.edu/gopost/board/aw26/32579/

- Max Weber, "Science as a Vocation." Available online at: http://anthropos-lab.net/wp/wp-content/uploads/2011/12/Weber-Science-as-a-Vocation.pdf
- Roger Brent, "In the Valley of the Shadow of Death." Available online at: http://hdl.handle.net/1721.1/34914
- David A. Relman, "The Increasingly Compelling Moral Responsibilities of Life Scientists," Hastings Center Report 43, no. 2 (2013): 34-35. Available online at: http://www.thehastingscenter.org/Publications/HCR/Detail.aspx?id=6264
- Gaymon Bennett, "H5N1 and the Politics of Truth," *Hastings Center Report* 43, no. 2 (2013): 35-37. Available online at: http://www.thehastingscenter.org/Publications/HCR/Detail.aspx?id=6265
- The Belmont Report. Available online at: http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html