Kathleen Leeper Div III Contract

Chairs: Herbert Bernstein, John Castorino

My Division III goal is simple: reconcile the inherent values and assumptions of my scientific production with my personal ones. The two are interlaced, of course, and "values" encapsulates years of academic and personal work. I'm interested in open (neuro) science, both as a growing phenomenon in science and as an active participant myself, while also deconstructing and recreating science and open biology as a value-driven enterprise.

The neuroscience/biology aspect of my work is a comparatively small technical question. Can introducing a set of transcription factors into stem cells change their differentiation fate, thus making P19 stem cells a useful model system for serotonin receptors?

Building on that scientific project as model system for scientific production, I can explore the theories behind and the slmaking of "open science". I'm making/practicing open science with an open lab notebook online, which is, granted, mostly for my benefit. But it's also a way to document my fact creation process, and developing ways based on first-hand experience to make open science & technology more useful and accessible to biologists.

Overall, of course, there's an encapsulating goal. The heart and spine of my Div III is an analysis of the hidden logics inherent in open knowledge and neuroscience. In exposing those, I can challenge and redirect my work to better align with my feminist, anti-racist, and anti-colonialist values.

So what am I actually producing? Tentatively, but likely:

- 1. an open lab notebook/website tracking the course of my research day-by-day
 - (a) serious and clean documentation thereof;
 - (b) practical open science
 - (c) interactive protocols (elaboration in person)
- 2. a multi-sectioned written work with sections on:
 - (a) the scientific background & results (e.g. a "classic" science-oriented Division III)
 - (b) the pros & cons of open science, whether it works or not, and if yes, what Hampshire could do going forward to encourage it
 - i. how my own experience with OS shapes my current (well, end of year) suggestions
 - (c) my value-driven analysis of the assumptions implicit/inherent and ways of going forward in
 - i. neuroscience work
 - ii. rhetorics of "openness"
 - A. implications of an open science synonymous with technoscience?
 - B. does it allow for new ways of connection between people and data and "science"
 - C. Who gets to use libre things? or open data? what barriers exist?

- D. in what worlds is open science *good* science?
- E. how does openness and/or libre-ness work with corporate/gov't powers?
- F. whose voices are the loudest in OS, and what voices are left out or used in ways they don't consent/agree with?
- iii. making space: is there space in my science and my technology for other knowledge forms and beliefs & how can I put it there?