

Title: Community Engagement as Scientific Practice

28 March 2023, Byrne House Seminar Room

Organiser: Sabina Leonelli (all inquiries to me)

All Egenis and students members invited, registration needed (first come first served)

Schedule:

9:00 Welcome and brief introduction (Sabina Leonelli, Paola Castaño - Exeter)

9:20-10:00 Sabina Leonelli: Turning Prospecting into Participation: Data Sharing and Inequity within Scientific Knowledge Production

The majority of biological data infrastructures tend to be hosted, funded and coordinated by English-speaking individuals working in well-resourced environments with reliable access to digital technologies and social media. This engenders disparity between (1) sources and types of data that can be analysed (which I call *inequity of representation*) and (2) in the opportunity researchers - but also the publics whose lives are heavily influenced by the way that their behaviours and environments are turned into data for scientific analysis - have to provide constructive feedback to the instruments, standards and infrastructures used to mobilise data (which I call *inequity of participation*). These two types of inequities highlight and exacerbate asymmetries in power and resources between local research traditions and the management of the relationship between science and society at a global level, in ways that help construe datafication practices as problematic forms of bioprospecting. Within this context, it is easy for well-meaning efforts to develop inclusive data practices to be instrumentalised as problematic forms of bioprospecting. After discussing this phenomenon with reference to contemporary international efforts to collect and share data about crops and about viruses harmful to humans, this paper explores efforts to counter this trend through the provision of visibility and epistemic power to participative data practices and governance, whereby data are no longer conceptualised as assets to be traded and shared, but rather as components of a wider situation of inquiry without reference to which they cannot be meaningfully used. I conclude that the very understanding of data and their function within empirical knowledge production needs to be reconceptualised in order to shift away from extractivist epistemologies and towards participative forms of scientific research.

10:00-10:40 Rachel Ankeny (University of Adelaide): Abandoning Narrow Concepts of Trust in Science in Favor of Engaged Science Citizens

Many claim that science is facing a 'crisis of trust' in what has been termed this current 'post-truth era.' When discussing public engagement with science, particularly with regard to policy decision making and local planning, the concept of 'trust' is frequently invoked but without any detailed analysis or consideration of its problematic nature. The notion of restoring 'trust' in science is a misguided notion for a variety of reasons. First, 'trust in science' can be argued to be a category error: it involves attributing a property (trust) to a thing (science) that could not possibly have that property. Science is not a homogeneous or specific institution, but is a widely dispersed, highly heterogeneous and ever-evolving set of practices. Even if we think in some more informal sense that we are able to 'trust in science', this approach is destined to fail for numerous reasons. These issues are made even more complex in cases where there may be scepticism not only in science and its outcomes but also lack of trust or ability to rely on the opinions or experiences of other stakeholders and concerns about broader institutional structures and their biases. Reflecting on empirical research in Australia in contentious domains including debates over genetic modification and

emerging technologies, this paper explores how concepts from the philosophy of science, notably understanding science as a form of 'social knowledge,' can enrich our understandings of how best to foster community engagement in science, and with other community members. It is argued that to find a more productive way forward requires increasing public engagement with various scientific practices and with each other through authentic engagement in dialogue about matters of common concern and about shared values, and by transparently exposing the limitations of scientific practices together with their prospects particularly as a form of social knowledge.

10:40-11:00 Coffee

11:00-12:00 Helen Longino (Stanford University): Interaction and Pluralism in Conflictual Contexts

My explorations in the philosophy of science have led me to two concepts that already have some significance outside of the philosophy of science, but that acquire particular meaning and valences through their situation in a philosophy of science context. I will explain how they emerge from practice-based investigations of the nature of scientific knowledge. I will then review what I have learned from observing how they are implemented in actual settings, focusing on several projects in the Upper Galilee. The concept introduced to these settings was that of pluralism, but pluralism can be understood in many ways, from a quietist conception of acceptance to a more active conception involving interaction and hence transformation. What is required of community members situated in conflict zones to embrace any kind of pluralism? What leads to transformation? What ought to be the goal of such interaction? These observations will be supplemented by some reflections on values at work in central state-community tensions in agricultural India.

12:00-13:00 **Roundtable Discussion (chair: Rose Trappes)**

13:00-14:30 Lunch and informal discussion