Philosophy of Science meets NiBio: looking for "the best scientific evidence"

Understanding, explanation, prediction and application of new technologies are the chief goals of science, and they all rely on the concept of causation: in the attempt to understand and influence the world around us, we need to know what causes what. In order to find causes, however, we must have some prior knowledge of what causation is. In this seminar, we want to bring together the abstract philosophical approach to causation with the concrete practice of the sciences.

Science relies heavily on methods of investigation. The reason we trust science against pseudo-science is the *way* in which it arrives at explanations and predictions: we trust the scientific method to provide us with the best evidence of causation. But which method is better suited to detect causation? The answer varies across disciplines, areas and even among single scientists and practitioners. In this seminar, we will discuss the relationship between the philosophy of causation and the choice of scientific method. We will try to show that which method we give highest relevance depends not only on the discipline, but also on the underlying assumptions about causation.

In the first presentation, we want to use this seminar to critically examine how:

- scientific practice is shaped and restricted by choice of methods;
- choice of scientific methods is grounded in norms of science;
- norms of science are grounded in philosophical assumptions about causation and probability.

Relevant issues to discuss after this initial presentation, concern the dominant paradigm of scientific methodology, the idea of causation that underlies it, and how research that complies or breaks with the orthodoxy is evaluated as more or less scientific. Is the dominant concept of causation productive for your research interests? Is there a need for a conceptual shift? How can philosophy of science support you in your quest of "the best evidence"?

The seminar is a collaboration between NIBIO and NMBU CAPS – Centre for Applied Philosophy of Science (https://www.nmbu.no/en/faculty/hh/research/centers/caps)





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Tuesday, November 14, 2017 09:00-12:30 Meeting Room "Skogen" (410), 4th floor Raveien 9, Ås

Philosopher Rani Lill Anjum and biologist Elena Rocca from NMBU CAPS will challenge NIBIO researchers and others to think about causation and our methods of investigation.

Seminar Agenda

9:00 - 9:10	Coffee/tea and take a seat				
9:10 - 9:15	Welcome and introduction	Anne Strøm Prestvik			
9:15 - 9:40	Who we are and what we do	Rani Lill Anjum			
	An example of philosophy of science meeting applied research	Elena Rocca			
9:40 - 10:30	Exercise: what is the best available evidence?	Elena Rocca			
10:30 – 10:45	Coffee/tea break				
10:45 - 11:30	Discussion about the exercise and reflection about how different background intuitions about causation might affect choice of evidence and science	Rani Lill Anjum			
11:30 – 12:00	The challenge: a real case, presentation and discussion	Giovanna Ottaviani Aalmo			
12:00 – 12:30	Lunch				
12:30	For those interested there is the possibility to stay and continue discussing with the speakers				