**Invitation Lab Seminar:** From Citizen Science to DIYbio, or Science beyond the University? (Massimiliano Simons (KU Leuven) & Winnie Poncelet (ReaGent))

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MASSIMILIANO SIMONS (KU Leuven) & WINNIE PONCELET (ReaGent) ‘From Citizen Science to DIYbio, or Science beyond the University?’

- Tuesday, March 7, 14-16 PM
- Room: 02.163 (Faculty of Social Sciences, CeSO, second floor, Parkstraat 45, Leuven)

**BIO**

**Winnie Poncelet** is a biochemical engineer, biohacker, entrepreneur, science communicator. After a short career in industrial insect breeding, he was one of the initiators behind the first DIYbio lab in Flanders, ReaGent, where he researches new biodegradable materials. He's also a driving force behind Ekoli, a non-profit dedicated to bringing bioscience education to underprivileged groups and school children. Recently he has teamed up with several colleagues in the collective Break it Down to offer his experience as services in science communication and innovation in education.

**Massimiliano Simons** is a philosopher currently doing a PhD at the Institute of Philosophy (HIW) at the KU Leuven funded by the Research Foundation – Flanders (FWO). His work is mainly focused upon constructivist claims about nature within French philosophy of science, ranging from Gaston Bachelard to Bruno Latour. Specifically, his project is concerned with understanding epistemological shifts within contemporary life sciences such as synthetic biology, systems biology and metagenomics.

**ABSTRACT**

Do-It-Yourself biology or DIYbio aims to open the field of molecular biology to all who are interested by showing that it can be done within one’s own garage or by opening community labs. In this sense it can be considered as one of the contemporary shapes of citizen or ‘amateur’ science. A great part of the existing literature focuses on how these cases can be seen as the sign of a democratization of science.

However, within these studies it is often forgotten that many of the members of the movements such as DIYbio are well-trained scientists with PhDs and other official credentials. Not only can this fact problematize the claims made by these studies, but it is also something that they cannot explain. Why do certified rocket scientists feel the need to design rockets outside of the official institutions? Why do biologists with a PhD stop their training and start tinkering in their basements?
Beyond a general introduction to DIYbio, this paper aims to do three things. First of all it aims to analyze the phenomenon at the level of discourse, mainly focusing on the anti-institutional element of DIYbio. Rather than seeing this citizen science as merely a form of the democratization of the sciences, its origins lay within a deep-rooted critique on existing institutions such as the universities and the biotech industry. Secondly, these discourses are contrasted conceptually with the possible historical origins of the movement, ranging from synthetic biology, hackerspaces to the biotech industry itself. The central question will be: even if at a discourse level they present themselves as the renaissance of biology, are there other tendencies, histories and origins present in their practices?

Thirdly, an attempt will be made to sketch possible future scenarios of DIYbio, based on personal experiences of setting up and maintaining a DIYbio lab and community, insights as a member of the global DIYbio movement and experience in implementing professional services in the DIYbio and maker sphere. Three observations will be at the core of this discourse.

Firstly, DIYbio today encompasses many different kinds of initiatives that practise biosciences in new ways, all as a mutation on its initial conception in 2008. Local groups that started out similarly, diversified over the years according the intentions of the local communities. Secondly, more and more attempts at professionalising are being made in older communities. An anti-institutional element is often kept and used as a competitive advantage against the establishment. Finally, DIYbio benefits from developments in the sharing economy and growing freelance culture. How do these factors work together and do they have the potential for systemic change?

**Organisation:** Life Sciences & Society Lab (http://soc.kuleuven.be/ceso/life-sciences-society-lab), Centre for Sociological Research (CeSO) - Faculty of Social Sciences KU Leuven Prof. Ine Van Hoyweghen (ine.vanhoyweghen@soc.kuleuven.be).