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Session 10. Societal discourse on Synthetic Biology.

Towards societal embedding of synthetic biology by organizing a fruitful science society dialogue

It is increasingly acknowledged that realizing an appropriate societal embedding of synthetic biology requires an interactive multi-stakeholder dialogue that includes the public at large (e.g Schmidt, 2009; Philp, 2013). However, at the moment synthetic biology is hardly discussed among the public at large (Kaiser, 2012; Stemerding & van Est, 2012).

Since 2012 we conduct a research project to investigate possible ways of opening up the development process of synthetic biology and to facilitate a multi-stakeholder dialogue. To this end we use the Interactive Learning and Action (ILA) approach (see e.g Betten et al, 2013). In this approach a dialogue is preceded by the identification of the perceptions and visions of relevant stakeholder groups. These include experts, policy makers, artists, citizens and so on. During this articulation phase, we use various data collection methods, such as interviews and focus groups (with the use of vignettes and vision assessment). Only when the concerns, ideas and visions of the different stakeholders are made explicit a meaningful dialogue can be organized. In this integration phase, the similarities and different perceptions and visions of the stakeholders are presented and discussed; participants reflect on each other's and their own ideas and underlying arguments. An important next step is that needs, concerns and ideas are translated to or incorporated in the design of new research and technology, leading to desirable innovation trajectories. Eventually this results in 'better' innovations (from the perspective of a wide variety of stakeholders, including citizens and vulnerable groups).

By sharing our findings and lessons learned in the project, we hope to contribute to and learn from others during the special session on the societal discourse on synthetic biology.

References

Betten, A.W, Roelofsen, A. & Broerse, J.E.W. (2013) Interactive Learning and Action: Realizing the promise of synthetic biology for global health. *Systems and Synthetic Biology*, 7(3), 127-38

Philp, J. C., Ritchie, R. J., & Allan, J. E. (2013). Synthetic biology, the bioeconomy, and a societal quandary. *Trends in biotechnology*.

Schmidt, M., Ganguli-Mitra, A., Torgersen, H., Kelle, A., Deplazes, A., & Biller-Andorno, N. (2009). A priority paper for the societal and ethical aspects of synthetic biology. *Systems and synthetic biology*, 3(1), 3-7.

Stemerding, D. & van Est, R. (2012). Geen debat zonder publiek: het opkomende debat over synthetische biologie ontleed. Den Haag, Rathenau Instituut.