

Workshop May 23rd – 24th. Scandic Solsiden hotel, Trondheim

Visions for Life Science Knowledge Commons

What can we hope to achieve? What do we wish to achieve?

In this two-day workshop we invite scholars to reflect on what is being valued in existing, emerging and envisioned life science knowledge infrastructures. We ask questions like: What visions, hopes and imaginaries guide the construction of such infrastructures? What becomes enacted as valuable through the practices of constructing them? How can questions like these contribute to well-constructed research infrastructures?

The workshop is hosted by the interdisciplinary project Crossover Research: Well-constructed Knowledge Commons, based in philosophy and systems biology. Crossover is engaged in GRECO, an international consortium dedicated to the construction of a digital knowledge infrastructure for the particular domain of gene regulation. This involves work of coordinating existing efforts to extract, structure and store biological information in a standardised digital format, thereby creating an open and interoperable *knowledge commons* comprehensible both to humans and computers. Such a gene regulation knowledge commons will in turn be part of and adjusted to other digital resources in the life sciences. Thus, the work of initiatives like GRECO taps into nothing less than a vision of a grand, unified life science knowledge commons encompassing all life science data, information and knowledge, supporting the envisioned life science of the future.

The event is Crossover Research's midterm workshop with ample time for discussions. We invite workshop participants to engage in discussions on visions and values - the ethos of life science knowledge commons - in the context of the GRECO initiative. Values, understood in a broad sense as denoting or producing the desirable, will be explored at various levels that range from practical considerations like code sharing and shifting of project goals to overarching visions of open science, systems biology and precision medicine. The workshop is part of an ongoing experiment on ways of practicing Responsible Research and Innovation (RRI) where we explore "ethos" as an RRI-concept.

Invited speakers:

Gaymon Bennett. Ass. Prof. of Religion, Science and Technology. Arizona State Univ.

Erik Fisher. Ass. Prof. School for the Future of Innovation in Society. Arizona State Univ.

Martin Krallinger. Head of Biological Text Mining Unit at Personalized Medicine, Life Sciences, Barcelona Supercomputing Centre, Barcelona, Spain.

Tsjalling Swierstra. Professor of Philosophy, Maastricht university. Prof II, NTNU

Denis Thieffry. Prof. of Systems Biology, de l'École Normale Supérieure, Paris

The workshop is free of charge, but registration is needed due to lunch orders.

Please register [here](#) before May 3rd in order to attend. Contact info:

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The workshop is organized by Crossover Research 2.0: Well-constructed Knowledge Commons, an interdisciplinary project funded by SAMANSVAR and IKT-pluss programs at NFR.

Program May 23rd:

08:30 – 09:00 Registration & Coffee

09:00 – 10:00 Introduction

(Martin Kuiper, Astrid Lægreid, Rune Nydal, Ane Møller Gabrielsen)

10:15 – 11:15 Going Digital

10:15 – 10:25 Why digital representation of knowledge?

(Martin Kuiper, Steven Vercruysse)

10:25 – 11:00 Digital biology: reimagining life (*Gaymon Bennett*)

11:00 – 11:15 Discussion

11:15 – 11:30 Coffee

11:30 – 12:15 Modelling Life

11:30 – 12:15 What can we hope to achieve with modelling? (*Denis Thieffry*)

12:15 – 13:15 Lunch

13:15 – 15:00 What is at stake in the Commons?

13:15 – 13:45 Threats to the Knowledge Commons (*Anamika Chatterjee*)

13:45 – 14:15 “Caring for Knowledge”: The human factor (*Ane Møller Gabrielsen*)

14:15 – 14:45 Why are knowledge bases worth making?

(Rune Nydal, Astrid Lægreid, Martin Kuiper)

14:45 – 15:00 Discussion

15:00 – 15:30 Coffee

15:30 – 16:30 The Costs of Common Resources

15:30 – 15:50 Community curation and curation guidelines (*Marcio Acencio*)

15:50 – 16:10 Sharing the source code (*Steven Vercruysse*)

16:10 – 16:30 Discussion

16:30 – 17:00 Discussion and summing up of day one.

18:00 Workshop dinner for invited speakers

Program May 24th

9:00 - 10:45 Stakeholder engagement: Why, who and how?

09:00 – 09:30 Community requirements driving a digital research infrastructure project
(*Martin Krallinger*)

09:30 – 10:00 GRECO – assembling stakeholders to set the standards for the gene regulation knowledge commons (*Martin Kuiper*)

10:00 – 10:30 Why have stakeholders become so prominent in innovation? Some epistemic, strategic, and ethical considerations (*Tsjalling Swierstra*)

10:30 – 10:45 Discussion

10:45 – 11:15 Coffee

11:15 – 12:30 Engaging the ethos

11:15 – 11:45 Researching the ethos (*Ane Møller Gabrielsen*)

11:45 – 12:15 Engaging the ethos (*Bjørn Myskja, Rune Nydal*)

12:15 – 12:30 Discussion

12:30 - 13:30 Lunch

13:30 – 15:00 Engaging the ethos continued

13:30 – 14:00 Cultivating the ethos (*Gaymon Bennett*)

14:00 – 14:30 TBA (*Erik Fisher*)

14:30 – 14:45 Discussion

14:45 – 15:00 Coffee

15:00 – 16:30 Closing panel: Well-constructed knowledge commons?

What are the values guiding the construction of GRECO? What values are already embedded in the existing structures and practices? Are they morally robust? Can engaging ethos help shape better solutions?