



## Final Report:

# EU-SPRI Summer School on the Science System in the 21st Century

### SHORT FACTS

**Location:** TIK Centre/ University of Oslo, Norway

**Date:** September 17-21 2018

**Organisers:** Magnus Gulbrandsen, TIK/UiO, Norway

**Speakers TIK/UiO:** Magnus Gulbrandsen, Fulvio Castellacci, Taran Thune, Susanne Bauer, Ana Delgado, Allan Dahl Andersen, Håkon Normann

**Guest Speakers:** Espen Solberg (NIFU), Sarah Davies (Uni. Copenhagen), Tommaso Ciarli (SPRU), Ellen-Marie Forsberg (OsloMet)

**Number of participants:** 21 from 14 different institutions and 8 different countries

**Number of participants from EU-SPRI network:** 11

**Overall satisfaction:** Good

### Overall impression

The EU-SPRI summer school 2018 at TIK/University of Oslo gathered a strong international group of younger researchers for lectures, discussions and group work. We followed the template from earlier schools, particularly those at SPRU and Utrecht, emphasising active participation and engagement rather than long reading lists and one-way lectures. Most of the participants appreciated the format and the feedback was generally good. We also had a fairly intensive social programme with two receptions, a course dinner and a harbour walk in nice early autumn weather (for Oslo). A few policymakers from Norway took part in around half of the programme, and junior researchers from TIK sat in on several sessions.

We gathered a group of lecturers representing different specialities within STI studies (innovation, STS, science policy), most of them from TIK but also four external ones including from the University of Copenhagen and SPRU. The theme of the school centred on the future of the science system and the current debates in science policy. These are potentially large issues when presented in light of different theories, but the balance between a discussion about the big and broad issues and going into some detail worked quite well. The participants in particular appreciated the day on policy (including RRI/research integrity) and the days focused on “perspectives” and “transitions”. For the second day, when the topic was research careers, the participants developed the following position statement:



What are the most important challenges in training and career development for young researchers today?

- Dealing with the uncertainty of short term contracts
- Including younger scientists in the institutions and departments
- Helping people pass
- Gender equality and dealing with the role of women in the science system
- Formulating what is expected
- Flexibility and balance in the PhD programmes (personal adaption)

What would be important action points to meet these challenges?

- Network building: Appropriate communication with faculty and other parties, peer communication, public communication skills, community
- Better supervision
- Capability building – training course
- Transparency

The list indicates some of our ambitions with the school – to tie the larger science policy debates to personal experiences, motivations and careers. From the lecturer side, this provided us with many interesting discussions. Below we include the announcement texts, final programme, participant evaluation, financial report and reading list.

### About the summer school

The European Forum for Studies of Policies for Research and Innovation, EU-SPRI Forum, holds a series of winter and summer schools targeted at state-of-the-art training for PhD candidates. This series focuses on the study of innovation policy and supporting disciplines. It concentrates on current research and debates on innovation studies and associated fields, with emphasis on policy and pressing societal challenges. TIK Centre for Technology, Innovation and Culture at the University of Oslo will host the fourth course in this series, following earlier courses at SPRU/University of Sussex, Utrecht University and CIRCLE/Lund University. The fourth course will focus on the science system using a mixture of lectures, debates and group work. It will include a combination of perspectives from science and innovation policy studies, STS and transition studies.

### Background for the topic

The science system seems to be under more pressure than ever. It is on the one hand expected to help contribute to solving society's grand challenges including facilitating larger-scale transformations and transitions. Science is steered through a renewed interest in missions, new forms of engagement with publics, new ideas about responsibility and directionality, and new linkages across societal sectors. On the other hand, however, there seem to be a number of



problems associated with modern scientific practice. Permanent jobs seem to be in short supply, universities and other research organisations face ever more detailed evaluation and auditing systems, digitalisation has hit scientific work and impact with full force, and some have criticised science for moving in a direction that will reduce its possibilities for meeting today's great expectations.

### Course objectives

In the EU-SPRI summer school 2018, these topics will be discussed in light of contemporary texts and perspectives. Each day provides a lens into different aspects of modern science. The goal of the course is to enable participants to critically examine the framings of modern scientific work and science policy, reflect upon some aspects of the organisation of scientific work and the people involved, identify critical and new issues at the interface between science and society, and participate in debates on how science can contribute to transitions and other societal challenges.

### Organisation of the course

Each day of the summer school was dedicated to a specific topic. The first day started with an introduction and discussion about current debates in the field of research policy. The second day was devoted to people in science, working conditions and the science system. The third day pivoted around the relation between science and society and with a clearer STS perspective. The fourth day focused on science and innovation policies, including a discussion on RRI and ethics/research integrity. The fifth day revolved around transitions and transition policy. The final program is presented below.

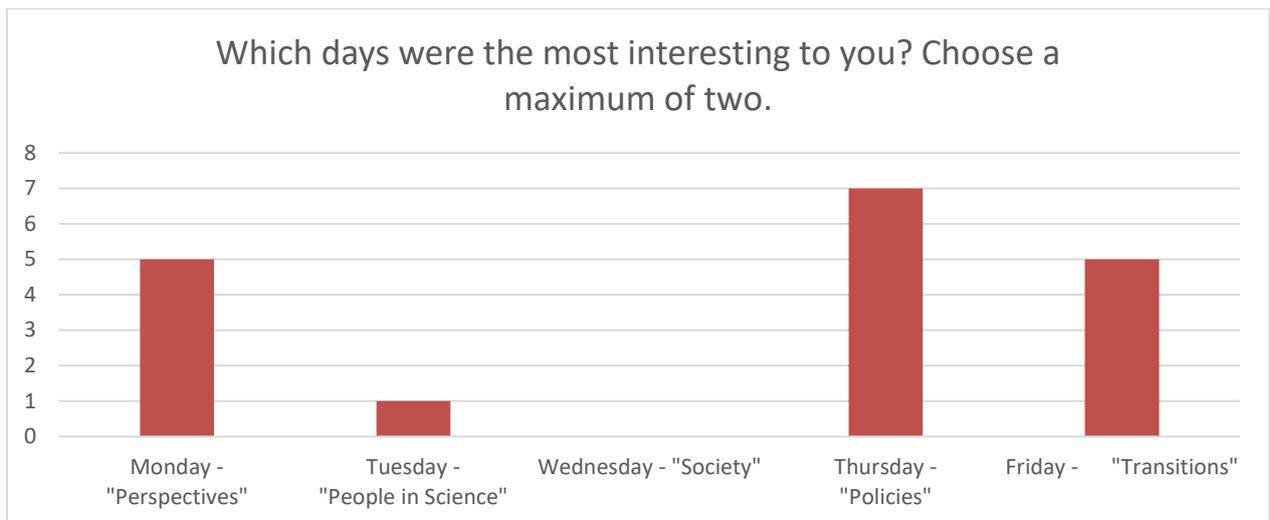
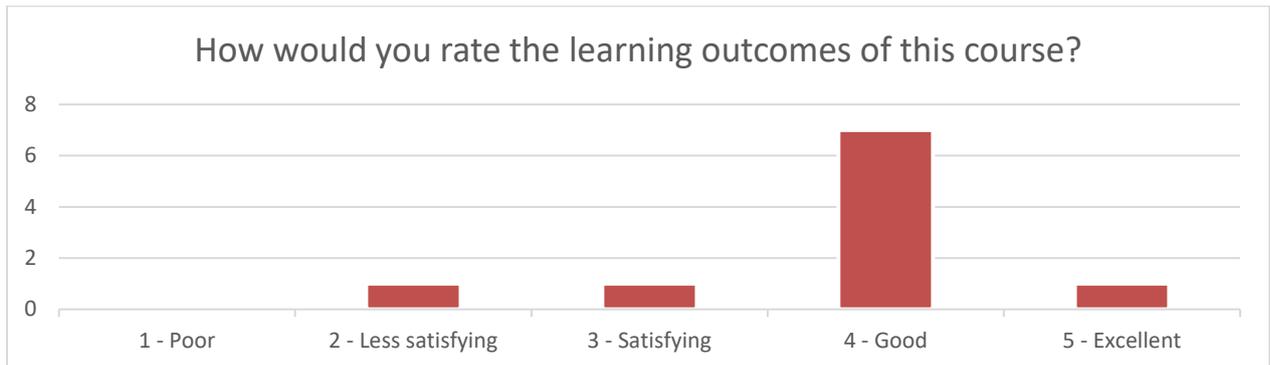


Time/ Day	17 Sep Perspectives	18 Sep People in science	19 Sep Society	20 Sep Policies	21 Sep Transitions
9.00- 10.30	Introductory session and short personal presentations – Magnus Gulbrandsen (MG), TIK	Working conditions and job satisfaction of public researchers in Europe: the role of permanent contracts – Fulvio Castellacci	Experimental Systems in Transition: Digital Modelling in the Life Sciences – Susanne Bauer, TIK	Origins and intersection of science and innovation policy (MG)	An industrial perspective on sustainability transitions: Allan Dahl Andersen (ADA), Jens Hanson and Håkon Normann, TIK
Coffee break					
11.00- 12.30	Changing perspectives on scientific knowledge production (MG)	The role of OECD reviews in shaping the future of science systems – Espen Solberg, NIFU	Group work: Science, Experiments, Policies and Publics: How does the new come into the world? (SB)	Making priorities in research – Tommaso Ciarli, SPRU	Debate: Implications for innovation and transition policy thinking (ADA)
Lunch 12.30-13.30					
13.30- 15.00	The return to missions in science policy (MG)	Academic staff, career tracks and competences – Taran Thune (TT), TIK	Public engagement with science and beyond 1 – Ana Delgado, TIK and Sarah Davies, University of Copenhagen	Responsible Research and Innovation (RRI) – status and future prospects – Ellen-Marie Forsberg (EMF), OsloMet	Closing session (MG)
Coffee break					
15.30- 17.00	Saving science: debate on the Sarewitz debate (MG)	Debate: what does it take to become a successful academic, and does higher education deliver? (TT)	Group work: Experimenting with publics (AD and SD)	Workshop on responsibility and integrity in research (EMF)	Opportunities for one to one meetings with faculty
After 17.00	Welcome reception	Oslo harbour walk	Course dinner	Reception	



## Evaluation

The evaluation questionnaire got 10 respondents. Overall, participants were satisfied with the course. Several themes were mentioned as very interesting, and particularly day 4 on the theme of policies was highlighted. Some commented that there could have been more time for discussion, and that some of the themes did not fit into the overall theme of the course.



*“For me the last day session on industrial perspectives and sustainability transitions was the most insightful part [...]. Also the introductory session and the one on RRI were both insightful and helpful.”*

*“I enjoyed the approach based on discussions rather than a vast bibliography; I believe it helps to keep the originality of thought. The speakers were great; I did especially value the approach on the OECD reporting/policymaking.”*

*“The scope was overall perhaps a bit too broad, so the course could perhaps have been more consolidated.”*



## Annex 1: Reading list

### First day – Monday:

Session on mission-oriented policies: [https://marianamazucato.com/wp-content/uploads/2018/03/mission-oriented\\_ri\\_in\\_the\\_eu\\_mazzucato\\_2018.pdf](https://marianamazucato.com/wp-content/uploads/2018/03/mission-oriented_ri_in_the_eu_mazzucato_2018.pdf)

Session on the “Sarewitz debate”: <https://www.thenewatlantis.com/publications/saving-science>

If interested in the Sarewitz debate, take a look at some of the responses here:

<https://www.thenewatlantis.com/publications/must-science-be-useful>

### Second day - Tuesday:

Taran: Roach & Saurmann (2010) A taste for science? PhD scientists’ academic orientation and self-selection into research careers in industry

<https://www.sciencedirect.com/science/article/pii/S0048733310000120>

### Third day – Wednesday:

Susanne: Orit Halpern, Robert Mitchell, and Bernard Dionysius Geoghegan, “The Smartness Mandate: Notes toward a Critique,” Grey Room, no. 68 (2017): 106–129.

<http://www.greyroom.org/issues/68/72/the-smartness-mandate-notes-toward-a-critique/>

Ana/Sarah: Marres, N., J. Lezaun and M. Tironi (2016), "Experiments in Participation", The Science and Technology Studies Handbook, Volume 4, edited by C. Miller, E. Smitt-Doer, U. Felt and R. Fouche (eds.), Cambridge: MIT Press.

### Fourth day – Thursday:

Nothing for the session on policy.

Session on priorities: <https://ideas.repec.org/p/sru/ssewps/2018-12.html>

First session on RRI: <https://www.sciencedirect.com/science/article/pii/S0048733313000930>

Workshop on responsibility and integrity:

[https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics\\_code-of-conduct\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf)

### Final day - Friday:

Allan et al.: Geels, F. W., Sovacool, B. K., Schwanen, T., & Sorrell, S. (2017). Sociotechnical transitions for deep decarbonization. *Science*, 357(6357), 1242-1244. doi: 10.1126/science.aa03760