

**The Kavli Institute for Systems Neuroscience**

Centre for Neural Computation

Egil and Pauline Braathen and Fred Kavli Centre for Cortical Microcircuits

Your letter dated    Your reference

Trondheim, 30. January 2019

## 1. Is there anything unclear or are there any issues that have not been addressed by the guidance document?

The Kavli Institute for Systems Neuroscience (KISN) endorses the aims of the open science initiative, however to rush this publishing model might have severe and unintended consequences. In the following we will point to challenges and risks we have identified associated with the current plan.

### CONCERNS ASSOCIATED WITH PROCESS ROBUSTNESS

- Implementation of Plan S should not take place until potential impacts and risks have been assessed more thoroughly and until a broad landscape of alternative high-quality publication avenues is present. Implementation steps should be formulated in a systematic and comprehensive manner. Since important details are still missing, a January 2020 startup is far too early.
- The risk assessment should include consultation and participation from a broader group of stakeholders (researchers, publishers, representatives from scientific societies, funders/sponsors, public information officials, organizations and unions, media, community members at large).
- Alternative solutions that avoid adverse impacts should be identified.
- Safeguards that mitigate or compensate for unintended consequences should be incorporated in the design of the project.

**Post Address**

Kavli Institute  
The Faculty of Medicine and Health Sciences, NTNU  
Postbox 8905  
NO-7491, Trondheim

**Org.no.** 974 767 880

Ph. +47 73 59 89 22  
contact@kavli.ntnu.edu  
<http://ntnu.edu/kavli>

**Location**

Kavli Institute  
MTFS  
O. Kyrres g. 9  
7030 TRD

- Only after scientists, societies and publishers better understand the measures needed to be implemented in order to publish in or as compliant OA journals or platforms, as well as intended and unintended consequences of the implementation process, should Plan S / cOAlition S request that these transformative agreements are executed, and within a sustainable timeline.

## CHALLENGES & RISKS ASSOCIATED WITH IMPLEMENTATION OF THE CURRENT PLAN

- **Academic freedom** is restricted by forbidding publication in non-compliant journals, or by punishing researchers for trying. An important element of the scientific process is the choice of target audience for the published work. Choosing the right target audience maximizes the impact of the publication and makes sure it is presented to the right people in the right way. No one is better placed to make judgements about publication avenues than the scientist himself/herself. This is an element of freedom of speech, a fundamental value in our society.
- **Plan S might be detrimental to quality in assessment, indexing, ranking, and communication of research:** Journals have taken on a role as (one of) the main quality checkpoint(s) in the scientific process by applying state of the art quality control mechanisms to ensure detailed, transparent and balanced reporting on research findings. A one-sided focus on cost reduction will occur at the expense of these quality-enhancing mechanisms.
- Article processing charge (APC) is presented as the predominant financial model for open access (OA), but it is **not clear how APC will represent a reduction in total costs**, while sustaining a robust and viable publication system.
- **‘Gold OA’ and APC both incentivize a low-quality high-volume publishing model.** The replacement of high value-added journals by quantity publishing may subsequently lead to the demise of (low-volume) high-quality journals, as well as long-standing science societies and other community institutions whose activities rely on journal income.
- APC will not eliminate the paywall, rather shift it. A readers’ paywall will be **replaced by an authors’ paywall**.

### Post Address

Kavli Institute  
The Faculty of Medicine and Health Sciences, NTNU  
Postbox 8905  
NO-7491, Trondheim

### Org.no. 974 767 880

Ph. +47 73 59 89 22  
contact@kavli.ntnu.edu  
<http://ntnu.edu/kavli>

### Location

Kavli Institute  
MTFS  
O. Kyrres g. 9  
7030 TRD

- **Changes that would disrupt public access to scientific knowledge:** Free peer-reviewed journals are not good sources of knowledge for the public. High quality journals compensate for this by producing editorial multimedia material accompanying the science papers, where papers are translated for the general public, including researchers in other fields. The addition of such editorial material is expensive. Only a handful open-access journals provide this service, and those who do (in the life sciences, particularly eLife and PLoS journals) rely heavily (to the tune of 25 million British pounds) on support from governments or funders (e.g., NIH, Wellcome Trust, Max Planck Society, HHMI) to maintain quality. With a business model where journals rely on APC, and where a cap is placed on author charges, we are worried that editorial and science-communication material will be sacrificed – making the published work less, not more, accessible to the general public than with the current publication system. Failure to secure citizens' access to scientific knowledge and discourses may prove detrimental to the health of public debates, to public faith in scientific facts, and to citizens' performance of civil duties.
- **Changes that would impair young researchers' competitiveness in the job market.** Restrictions from publishing in current top journals will have a damaging effect on young researchers' careers. Obtaining papers in journals of high-impact (paywall) is key to getting competitive jobs in the world. Plan S will effectively terminate recruitment from countries not participating in Plan S, like U.S. and Germany, where publications in paywall journals like Nature and Science are still the currency for job seekers.
- **Plan S will similarly terminate collaborations with scientists in some of the largest science countries of the world, including U.S., Germany, Switzerland, and Japan – as well as Nordic countries.** It will be impossible to recruit colleagues from these countries to join research projects with a ban on publication in the best journals of the field.
- **Changes that would split the community of researchers and the global research system.** We are worried that the potential exclusion of Plan-S compliant authors from up to 80 % of journals and 97 % of the highest-quality (level 2) journals will discourage international research collaborations and joint publications between cOAlition S / Plan S countries and the rest of the world, and similarly discourage internationalization of researchers, preventing European scientists from getting access to technology and

**Post Address**

Kavli Institute  
The Faculty of Medicine and Health Sciences, NTNU  
Postbox 8905  
NO-7491, Trondheim

**Org.no.** 974 767 880

Ph. +47 73 59 89 22  
contact@kavli.ntnu.edu  
<http://ntnu.edu/kavli>

**Location**

Kavli Institute  
MTFS  
O. Kyrres g. 9  
7030 TRD

theoretical diversity.

## 2. Are there other mechanisms or requirements funders should consider to foster full and immediate Open Access of research outputs?

- **Designing robust transitional processes:** We request incorporating stakeholders' concerns into the decision-making process by performing broad consultations, careful assessments, evaluation and formulation of impacts and risks. In addition, it is necessary to incorporate safeguards and alternative solutions into the project design and the implementation process. Only after this information is acquired should decisions be made regarding timeline-setting and project-execution. This should be followed up with close monitoring for unintended consequences.
- We request **reconsidering current timeline** for implementation and execution.
- We would suggest negotiating **hybrid solutions** (APC, cap, embargo) with existing publishers to secure the continuation of the highest-quality science journals. These journals have evolved over decades or centuries and cannot be replaced within months. If the ideal of 'Gold OA' is not financially sustainable, consider accepting '**Green OA**' (late version of the manuscript posted on institutional or international platforms with an open access and reuse license, but with an embargo) as a viable alternative.
- A cap on publication fees should **not be set below the cost for assessment, processing, and production of editorial material** per accepted article at quality journals.
- Scientists should have the last word on where to publish their research. Plan S should encourage OA but never use force.

### Post Address

Kavli Institute  
The Faculty of Medicine and Health Sciences, NTNU  
Postbox 8905  
NO-7491, Trondheim

### Org.no. 974 767 880

Ph. +47 73 59 89 22  
contact@kavli.ntnu.edu  
<http://ntnu.edu/kavli>

### Location

Kavli Institute  
MTFS  
O. Kyrres g. 9  
7030 TRD