

SPARC Japan NewsLetter provides activity and seminar reports. The seminar report includes its outline, program with speakers' introductions and abstracts, panel discussion, attendee feedback, and afterword.

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# SPARC Japan Activity Reports

## **SPARC Japan Governing Board**



Please see materials of SPARC Japan Governing Board on our website: <a href="http://www.nii.ac.jp/sparc/about/committee/">http://www.nii.ac.jp/sparc/about/committee/</a>

## About the Committee for the Promotion of the Scholarly Communication

The International Scholarly Communication Initiative (SPARC Japan) started in 2003 to work on the digitalization and globalization of academic magazines published in Japan. Since 2003, the operations of SPARC Japan have been reevaluated alongside changes which have occurred to the distribution of academic information. At the end of the fifth term (FY2018), however, it steered its course toward the role of promoting the academic information distribution infrastructure development by coordinating among stakeholders rather than focusing on specific operations.

Thus, the name of the organization designated to establish action policies was changed from the Steering Committee of the International Scholarly Communication Initiative to the Committee for the Promotion of the Scholarly Communication (SPARC Japan Committee) in FY2019. The new SPARC Japan Committee will conduct activities based on the basic policies the following basic policies.

With the recent advancement of information and communications technologies, open science has become common in and outside of Japan, where research processes including research data are digitalized and shared in addition to the open access of academic journals. Increased sharing of academic journals and research processes contribute to the creation of new knowledge. Thus, in the first term, the SPARC Japan Committee will identify trends in, and actual situations of, the distribution of academic information in and outside of Japan to promote open access and open science. The Committee is also going to explore strategies related to the release and utilization of academic information based on the findings and carry out advocacy activities with the participation and cooperation of stakeholders, mainly those in the academic community.

The SPARC Japan Committee will focus on the following activities based on the basic policy in the first term (FY2019 to FY2020): (1) cooperation with stakeholders in Japan; (2) examination of strategies related to international cooperation and submission of proposals; (3) implementation of advocacy activities; and (4) proposing investigations related to the trends in the distribution of academic information. Details of the activities will be posted on the website.

## SPARC Japan Seminar Report

The 2nd SPARC Japan Seminar 2018 (Open Access Summit 2018)



## "Quality Control in the Age of Open Science"

Thursday, October 25, 2018: National Institute of Informatics 12th floor Conference Room (Attendees: 53)

The theme of the second seminar was quality control in the age of open science and how we can guarantee quality of content. The participants gave talks about their latest attempts under the current situation.

At the seminar held in 2017, quality assurance for content that was recorded in preprint servers and institutional repositories was chosen as a subject for discussion. The participants reaffirmed that the need for quality assurance is a universal challenge in science. At the 2018 seminar, we covered our practices of peer review and version control in F1000 Research and publishing or posting research results on other platforms than traditional journals, such as arXiv and BioRxiv. In addition, some researchers spoke about what they pay attention to when they choose a medium for publication, how they are using various publication platforms, and problems and challenges with publication platforms from the viewpoint of the researcher.

The following pages contain excerpts of the participants' comments, a postscript about the seminar, and the full text of their research (reposted).

See the SPARC Japan website for handouts and other details (<u>https://www.nii.ac.jp/sparc/en/event/2018/20181025en.html</u>).

#### Outline

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Open Science is foreseen and expected to make fundamental transform of science itself. Various efforts such as a digitization of academic journal have already done for advancing Open Science, even aiming publishing broader research results with ICT. Then the quality control of information is crucial to utilize open research results and also to accelerate Open Science. The way of the peer review had been argued many times in the past, even before digitization of academic journal. Nowadays, digitization and openness lead various new attempts about the quality control, for example open peer review and lightweight peer review. While use of preprints is becoming the main method to publish research results in some research fields such as computer science, the evaluation method of research results without conventional peer review is a pressing issue. On the other hand, the "Wellcome Trust", a biomedical research charity in UK, launched the "Wellcome Open Research" which was the platform for peer-reviewed open paper and data publishing.

Under these circumstances, we once recognized the importance of deepening the discussion about quality control through a discussion of preprint server and institutional repositories on the 2nd SPARC Japan Seminar 2017. In addition, we talked about a history of science and beginning of the peer review on the 3rd SPARC Japan Seminar 2017, which reconfirmed that the quality control was a universal issue of all time. ICT and openness develop revolutionary research environments. Thus, it is very important for looking into the future of the scholarly communication that developing system for quality control, beyond conventional peer review in a specific research community, in inter- and trans-disciplinary filed or in citizen science field. Therefore, on the 2nd SPARC Japan Seminar 2018, we will discuss perspective of quality control in the age of Open Science and how we could guarantee quality of contents. We will share information about recent concrete cases, too.

### **Presentation Abstracts and Speakers**

Moving Beyond the Journal: A Changing Role for Publishers, Funders and Institutions Rebecca Lawrence (F1000)





The traditional approach of publishing new findings in research journals is becoming outdated, costly and unsustainable, and can delay and damage scientific progress. With a growing worldwide

shift towards more open access and open

science policies, together with significant technological advances, it has now become possible to address many of these problems. In 2013, F1000 launched the world's first open research publishing platform, F1000Research, combining the ability to publish rapidly with functionality to ensure greater transparency, robustness and reproducibility of research. Our approach uses near-immediate publication together with FAIR data sharing, followed by transparent invited peer review and article versioning. It brings control back to the author(s) and aims to remedy many of the problems associated with traditional and increasingly outdated modes of publishing research, to facilitate the transition to more transparent, collaborative and efficient ways of doing research and delivering impact.

Testimony to the rising interest in, and demonstrable benefits of, open research are publishing, we now providing publishing platforms to a large number of high-profile research-funding agencies and research-performing institutions across the Melinda world (e.g. & Bill Gates Foundation, Wellcome Trust, African Academy of Sciences). This approach changes the respective role of publishers, funders and institutions in the ecosystem, and has the chance to finally address many of the well-known problems with the current research and researcher evaluation system.

#### Profile

Rebecca Lawrence is Managing Director of F1000, providers of a series of tools and services to support the research community in writing, publishing, discovering and evaluating new scientific findings. She was

responsible for the launch of the novel open science publishing platform F1000Research. She has subsequently led the initiative behind the recent launches of Wellcome Open Research, Gates Open Research, and many other funder-and institution-based publishing platforms that aim to start a new trajectory in the way scientific findings and data are communicated and ultimately research and researchers are evaluated.

She is a member of the High-Level Advisory Group for the EC's Open Science Policy Platform, chairing their work on next-generation indicators and their integrated advice: OSPP-REC. She has been a co-Chair of a number working groups focussing on data and peer review, for organisations including the RDA, CASRAI and ORCID. She is also an Advisory Board member for the data policy and standards initiative, FAIRsharing, and for DORA (the San Francisco Declaration on Research Assessment). She has worked in STM publishing for almost 20 years for several publishers including Elsevier where she built and ran the Drug Discovery Group. She originally trained and qualified as a pharmacist, and holds a PhD in Cardiovascular Pharmacology.

### Innovations in Publishing - an Author's Perspective



**Ben Seymour** 

(Center for Information and Neural Networks (CiNet), National Institute of Information and Communications Technology)



I will provide an author's perspective on the current state of publishing. I aim to talk about

what drives decisions about where to publish, and what authors like and don't like about the current publishing environment. I will discuss issues like journal prestige, open access, data availability, submission process, publishes ethics, and try to give an insight into the equation that goes through the mind of the author. I'll also present and compare my experience with Wellcome Open Research, especially in the context of other new open research publishing platforms.

# SPARC\*Japan

#### Profile

My lab addresses the computational and systems neuroscience of pain. This is primarily basic science level research, but with some translational research in clinical populations. I am a Wellcome Clinical Fellow at the Computational and Biological Learning Lab at Cambridge University, and Principal Investigator at the Center for Information and Neural Networks (National Institute of Information and Communications Technology) and ATR (Kyoto) in Japan. I am also Professor at Osaka University in Japan, an honorary consultant neurologist at Addenbrookes Hospital in Cambridge, and Sackler Senior Research Fellow at Magdalene College, Cambridge.

# The Future of Ecosystem of Scholarly Communication - the State of-the-Art of arXiv and More -

#### Hideaki Takeda (National Institute of Informatics)



The ecosystem of scholarly communication is dynamically changing now due to use of the Internet and dissemination of Open Access activity. There are many different ways to publish research results in-

stead of the traditional ways such as publishing articles in journals. We overview the

#### **Utility of Preprints in Life Science**

#### Hidemasa Bono (Database Center for Life Science)



The preprints are now getting widely used in life science. In the preprint server, researchers can share not only the information about biological results before the peer-review

process, but also the information about newly developed commercially available machine and the documents about publicly available databases and webtools. In 2018, I uploaded a new research manuscript to BioRxiv, the most famous preprint server in life science, and one of my collaborators also did the same before we submitted the manuscript to peer-reviewed journal. I will introduce the current utility of preprints in life science and try to discuss how to current ecosystem of scholarly communication and in particular the role of preprint servers. Furthermore we discuss the stateof-the-art of arXiv.

#### Profile

Managing Director of SPARC Japan Governing Board

http://www.nii.ac.jp/en/faculty/informatics/ takeda\_hideaki/

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annotate the quality of information in preprints.

#### Profile

After the initiation of FANTOM(Functional Annotation of Mouse) project at RIKEN, he joined the MEXT Integrated Database Project at Database Center for Life Science(DBCLS), which was established in Research Organization of Information and Systems(ROIS). In DBCLS, they launched the project TogoTV(an archive of tutorial videos expounding how to use biological databases and tools), and now he is involved in the technology development of database integration in tight collaboration with DNA Data Bank of Japan(DDBJ) in the National Institute of Genetics

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## **Panel Discussion**

#### Summary:

There was an exchange of opinions between speakers and the audience during the panel discussion session.

• What are the ideal relationship styles between pre-print servers and conventional research communities such as journals and academic societies? Should we regard pre-print servers and others as functions which play different roles within the same system rather than completely different things?

• What are possible roles of librarians in the era of pre-print servers? Can librarians introduce various channels to release journals including pre-print servers to researchers and students, educate them, and support data sharing such as curation?





#### Moderator: Shigeru Yatsuzuka

(National Bioscience Database Center, Japan Science and Technology Agency)

#### Profile

Researcher, National Bioscience Database Center, Japan Science and Technology Agency. Shigeru Yatsuzuka joined National Bioscience Database Center in 2015 after working as a system engineer. He is in charge of the project to collect life science data scattered across various subjects and institutes, to research and coordinate data, to create metadata and to publish data with clear licenses.

## **Attendee Feedback**

(University/fields related to university and education)

- We were able to learn about the new directions of academic publications.

(Company/fields related to academic publications)

- We were able to learn about researchers' views on pre-print, which was very useful.

(Academic association/fields related to academic publications)

- We were able to understand trends in open science, the positions of researchers, and quality warranties. We appreciate the sharing of the latest information about academic fields through online broadcasting. [From a live broadcast viewer]



## Afterword

I was involved with this from planning for the first time. It was really stimulating to work closely with Rebecca, who said no to the conventional distribution of academic information through commercial publications, and researchers who were actually using pre-print servers. A difficult question we had since the planning phase was whether or not it was okay for librarians to become involved with the warranty of research quality. Yet, we recognized its importance when the guideline of data management was presented in the panel session.

#### Yumiko Nakahara (University of Tsukuba)

○ I became a working group member this year and worked from the planning phase for the first time. I may have learned the most among the members, because themes such as the latest trends in pre-print and the control of research quality in the era of open access and open science was quite different from the daily work of a librarian. I would like to take this opportunity to explore how libraries could change from here.

> Misa Nakamura (University of Tokyo Library System)

• This project was challenging in many ways. The first was the theme. I was able to explore open science from a completely different angle from before as the theme was how quality could be warranted. The second was the method. Speakers in distant locations gave lectures through the online conference system. I imagine the preparation was quite time and labor consuming for the secretariat, but it widened the opportunities for many people, including those overseas. I 0

expect that SPARC Japan seminar will keep tackling many challenges.

Shigeru Yatsuzuka (National Bioscience Database Center, Japan Science and Technology Agency)

○ As a member of the planning staff, I visited Wellcome Trust in January 2017 and discussed with people there about Wellcome Open Research, which was new back then. I then spoke at the OEDC workshop with Rebecca in April 2017, which constructed the practical foundation of this project. The discussion was difficult, but I believe it is important to record the self-directed discussions on this theme that took place in Japan when no clear answer was yet to be found even on the global stage.

Kazuhiro Hayashi (National Institute of Science and Technology Policy)

○ I started participating in the working group this year. The discussion was founded on the philosophy of how researchers and publishers could promote and spread open access and open science. It was simulating for the operating staff as well. In the backyard, Rebecca asked us to suggest good tourist spots to visit during her busy schedule with many meetings. The request kept some of the staff members thinking for a while. As I am involved with Edo and Tokyo research, I realized the importance of making information open, including research information and daily information.

Chikahiko Suzuki (Center for Open Data in the Humanities / National Institute of Informatics)