SPARC✱Japan NewsLetter

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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:
http://www.nii.ac.jp/sparc/about/committee/

arXiv.org member consortium

arXiv.org (archive dot org) is a pre-print server of physics, mathematics, computer science, and related fields established in 1991. In 2017, the fields of electric engineering system science and economics were added. The number of registered papers is about 1.50 million as of the end of 2018. The annual number of downloads is more than 220 million. The total number of downloads exceeded one billion in 2017. The Cornell University Library (CUL) had long been operating the system when administration was transferred from the CUL to the Cornell Computing and Information Science (CIS) in January 2019. The member advisory committee (selected from members) and the scientific advisory committee (scientists and researchers) are also installed for governance. Globally, 231 organizations in 27 countries are supporting the system as of the end of FY2018 through the arXiv membership program that started in 2013.

SPARC Japan defined "cooperation with international OA initiatives" and "advocacy activities related to the distribution of academic information" among its targets in the fifth term. Specific activities include the role of secretariat for arXiv.org's Consortium of Japanese

Research Libraries (coordinated by the National Institute of Informatics [NII] and NII Japan Consortia) to coordinate among participating organizations in Japan and carry out PR activities. Currently, 16 organizations (two new members joined in 2018) are participating in the global effort through this consortium. One seat is given in the member advisory committee based on the level of contribution. Professor Hideaki Takeda of the National Institute of Informatics (chairperson of SPARC Japan operating committee) is now participating as a representative.

Funds come from membership fees from members as well as support from the Cornell University Library and the Simons Foundation. The NII is gathering donations from participating Japanese organizations and presenting them to arXiv.org every year. Each participating organization is providing donations to the NII. The Sloan Foundation and the Heising-Simons Foundation are also providing funds to the next-generation arXiv initiative. Online donations have also been collected since a trial run was started in 2015.

- 550,000 dollars depending on funds raised from members (annually, forecast for 2019)
  The membership fee is 1,000 to 4,400 dollars per year depending on the average ranking based on uses (number of downloads) over the past three years (2015 to 2017).
- Cornell University Library: 170,000 dollars (annually) + indirect costs (37% of total cost)
- Simons Foundation: 100,000 dollars (annually), matching fund of 300,000 dollars (annually)
- Sloan Foundation: 450,000 dollars (next generation arXiv initiative, total amount)
- Heising-Simons Foundation: 322,000 dollars (next-generation arXiv initiative, total amount)
- Online donations: 56,666 dollars (annually, collected in 2017)

  Note: Please refer to "arXiv Update - January 2019" for the latest information.
  https://confluence.cornell.edu/display/arxivpub/arXiv+Update+-+January+2019

■ SPARC Japan Seminar Report

The 1st SPARC Japan Seminar 2018

"To Promote a Data Management Policy and Roles

of Researchers and Librarians"

Wednesday, September 19, 2018: National Institute of Informatics

12th floor Conference Room (Attendees: 70)

In this seminar, we discussed how to develop the data management policy and how to use it in library service with the scope and background of the guideline in mind.

See the SPARC Japan website for handouts and other details (https://www.nii.ac.jp/sparc/event/2018/20180919.html).

Outline

For promoting open science in Japan, many institutions are making efforts to encourage research data sharing. However, a data management policy, which is a policy for realizing open science, and its operational framework has not been developed completely.

In June 2018, the Cabinet Office established the "Development Guideline of the Data Management Policy for National Research and Development Agency" (temporary translation) with this situation in mind. Not only national research and development agencies but also universities and private companies allocated publicly fund need to develop their own data management policy by the guideline.

The guideline shows the point to develop a research data management and its using policy, and some elements (purpose, definition, limitation, management, metadata, identifier, etc.). Researchers who generate, manage and publish research data on a daily basis and librarians involving in the quality management, distribution, and provision of research data through applying metadata are required to be engaged developing a data management policy actively.

For example, the guideline shows the requirement that research data should keep as possible with the "FAIR Principles" as the international research data management principle. These principles - "Findable," "Accessible," "Interoperable," and "Reusable" - are applicable not only for research data but also for the circulation of scholarly information including principal library services.

In this seminar, we discuss how to develop the data management policy and how to use it in library service with the scope and background of the guideline in mind.

Presentation Abstracts and Speakers

An Overview of the Integrated Innovation Strategy and the Aim of the Guideline for the "Development Guideline of the Data Management Policy for National Research and Development Agency"

Shinichi Akaike (National Institute of Science and Technology Policy / Cabinet Office)

Kazuhiro Hayashi (National Institute of Science and Technology Policy)

Open Science is placed as a main part of development of the "Knowledge base" in the Integrated Innovation Strategy decided by the Cabinet on June 2018. For its practical implementation, governmental research institutions were requested to set their research data policy and the cabinet office released the "Development Guideline of the Data Management Policy for National Research and Development Agency" (temporary translation) for their help. In this presentation, an overview of the Integrated Innovation Strategy and the guideline would be introduced with the background and purpose to encourage discussion to further advance of the utilization of research data.

Technology Agency (JST); Professor of Institute of Innovation Research, Hitotsubashi University; Senior Analyst, MEXT. He was in charge of Director, Science and Technology Foresight Center, National Institute of Science and Technology Policy (NISTEP) from April 2016 to March 2018, and was promoted as Senior Fellow, NISTEP in April 2018. His obtained MSA at Graduate School of Tokyo University, MSc in Science and Technology Policy at SPRU, Sussex University and Ph.D. at Graduate School of Tokyo Institute of Technology. He is interested in making linkage between policy formation and academic studies in Science, Technology and Innovation Policy.

Profile
Shinichi Akaike

Senior Fellow, National Institute of Science and Technology Policy (NISTEP), Ministry of Education, Culture, Sports, Science and Technology (MEXT).
Director, Bureau of Science, Technology and Innovation Policy, Cabinet Office.
Dr. Shinichi Akaike joined the Science and Technology Agency in 1992, and experienced various positions including First Secretary (Science Attache), Embassy of Japan in Sweden; Director, International Exchange Promotion, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT); Assistant to Deputy Director-General, Center for Research and Development Strategy, Japan Science and

Kazuhiro Hayashi

Member of SPARC Japan Governing Board Senior Research Fellow, National Institute of Science and Technology Policy.
He has been in Scholarly publishing, in a wide variety of roles, for more than 20 years. At Chemical Society of Japan, he has worked successively as an Editor, a Production Manager, an E-journal Manager, and a Promotions Manager. Covering a broad range of roles in publishing, he is focused on scholarly communication through E-journals, and he has reconstructed and improved the way publishing is managed through his skills involving information technology. He now studies a Science for Science and Innovation Policy to give administrative

people and policy makers some evidences for Science and Technology policy. His current main task is policy implication of Open Science and Open Access, together with developing a new way to foresight ST trends. An expert member of the working party of Open Science for G7 Science and Technology Ministry meeting, also an expert member of the OECD/GSF project of Open Science.

The Data Policy of National Institute of Environmental Studies, a Step Toward Open Data

Tomoko Shirai

(Center for Global Environmental Research, National Institute for Environmental Studies)

The National Institute for Environmental Studies (NIES) undertakes a broad range of environmental research in an interdisciplinary and comprehensive manner. NIES has developed and released its open data policy in April, 2017. I will introduce the NIES data policy and how it was developed, as well as some ongoing attempts to promote Open data at NIES.

Profile
Tomoko Shirai

Tomoko Shirai completed her PhD in atmospheric trace gases analysis at the University of Tokyo. Thereafter, she worked at the Earth Observation Research Centre of National Space Development Agency of Japan (currently JAXA) and participated in aircraft measurement campaigns and earth observation satellite projects. Since February 2002, she joined the Roland/Blake laboratory in the chemistry department at UCI as an associate research specialist to study intercontinental transport of air pollution. She joined National Institute for Environmental Studies (NIES) in 2004. Her present research is focused on the environmental impact of atmospheric trace gases, especially greenhouse gases (CO_2, CH_4, halocarbons). She also develops a database (Global Environmental Database) and fosters open science. She serves as a Planning section member for NIES since April, 2018.

Collaborative Database Construction in Digital Picture Library for Area Studies

Yuzo Marukawa (National Museum of Ethnology) /Shun Ishiyama (National Museum of Ethnology)

"Digital Picture Library for Area Studies" (DiPLAS) is a database that accumulates images photographed by researchers on area studies. The National Museum of Ethnology is promoting the construction of the database DiPLAS, which is the support project for "Grant-in-Aid for Scientific Research on Innovative Areas - Platforms for Advanced Technologies and Research Resources". In this presentation, we will report on the detail of information system and supports in collaborative database construction works.

Profile

Yuzo Marukawa

Associate Professor, Department of Advanced Human Sciences, National Museum of Ethnology.
Doctoral Degrees: 2003, Doctor of Engineering (Tokyo Institute of Technology)
Research Fields: Informatics of Association and Information Services for Cultural Assets

Shun Ishiyama

Project Research Fellow, National Museum of Ethnology.
Shun ISHIYAMA is a Project Research Fellow of Digital Picture Library for Area Studies (DiPLAS) project at National Museum of Ethnology. He contributes his Anthropological and Area studies mainly in Afro-Eurasian dry lands, Sahara Oasis and Sahel-Sudan dry land.

Panel Discussion

Summary:

In the panel discussion, there was a lively discussion based on questions from panelists, attendees at the venue and online viewers through social media, such as YouTube.

Though developing a data policy is not an obligation, we need to be prepared because the situation is progressing in the direction that a data policy will be required to apply for research funds.

Organizing research data and applying metadata by researchers is a somewhat typical approach by a librarian. Therefore, I think that dialogs between researchers and librarians will lead to an organized movement of all research activities.

Moderator: Takanori Hayashi

(Japan International Research Center for Agricultural Sciences)

Profile

Head of Information Management Subsection, Publications and Documentation Section, Information and Public Relations Office, Research Planning and Partnership Division, Japan International Research Center for Agricultural Sciences.

Takanori Hayashi joined Japan International Research Center for Agricultural Sciences in 2014. He received his Ph.D. degree in informatics from the University of Tsukuba in 2016. He is in charge of library and web service operations including collect and provider of research information, and support developing databases.

Attendee Feedback

(person affiliated with business/others)
– I was aware that researchers considered providing data bothersome; consequently, I attended today's seminar with an interest in whether a research support system or software that could easily tag data had been developed in Japan in accordance with a data management policy. I believe that improvements in data cataloging tools will allow librarians and RAs to become actively involved and cooperate in the provision of data.

(person affiliated with university library)
– The seminar was so informative that I learned of the trends in open science in Japan and overseas, as well as the real status of how institutes that actually disclosed data were promoting efforts, as well as the problems, achievements, and responses they had.

(person affiliated with university library)
– We just built our repository. I am concerned that the situation regarding open science may not progress unless the person in charge of the repository (librarian in our case) acquires a higher level of knowledge and implements interim measures until the realization of open science. The presentations by the National Museum of Ethnology have been very useful, since we are now building a digital archive.

(person affiliated with university library)
– This was a very productive seminar because I caught a glimpse of specific cases and active researcher's viewpoints. However, I personally wanted to know more about overseas cases. In the seminar, they said that a data policy might be mandatory in the future to receive Grants-in-Aid for Scientific Research. I also wanted to know more about the situation as to whether there are nations or organizations that are actually imposing or plan to impose such requirements. In addition, it would have been a more multifaceted seminar with a legal perspective on what to keep in mind when we formulate the policy for research data on personal information, such as in the medical field.

Afterword

☺ In this seminar, I think we could hear about a variety of different cases ranging from the development of a policy required for disclosure of research data to the actual disclosure of the data. The disclosure of research data and development of a data management policy are an approach based on the Integrated Innovation Strategy at the policy level. Through the discussion, we recognized the goal of the disclosure of research data and development of a data management policy as well as the flow from the policy level to the actual research level including the library. As one of the project personnel, I would like to express my gratitude to all who attended the seminar. We would like to continue this seminar as an opportunity for researchers and librarians to collaborate.

Takanori Hayashi
(Japan International Research Center for Agricultural Sciences)

☺ I was in charge of posting on our official Twitter account. I tweeted about the lecture in real time, but I am afraid that I could not manage to fully follow the details. Several times the audience listening to the lecture posted supplementary tweets to the account. One of the topics of this seminar was collaboration on research data. I think that operating staffs and attendees indeed collaborated in the seminar.

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

☺ The Development Guideline of the Data Management Policy for National Research and Development Agency (temporary translation) recommends defining an open-and-close strategy according to each organization's mission. I would like to regard development of the data management policy not as an obligation but as a good opportunity to reconsider about what academic information and research activities in our organization should be.

Yuki Ishiyama
(Department of Libraries and information,
Hitotsubashi University)