

SPARC Japan

(International Scholarly Communication Initiative)

Annual Report FY2015

National Institute of Informatics (NII)

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Foreword

Fiscal 2015 marked the final year of phase 4 of the International Scholarly Communication Initiative (SPARC Japan) launched in 2003. This document provides an annual report summarizing the activities carried out during the past year. The contents of the newsletters covering SPARC Japan Seminars are also reproduced here in whole.

A basic policy of phase 4 of this Initiative has been to prioritize activities promoting open access. Consequently, the themes of the total number of 13 SPARC Japan Seminars organized during phase 4 focused on open-access advocacy activities. These seminars attracted the attention of librarians and publishers and benefitted relevant groups by serving as a generally successful venue for exchanging views and sharing information. Seminars held with overseas guests were particularly meaningful and helped create a better awareness of developments in Japan in such areas as the commercialization of open access and approaches to financial assistance. In total, the results of these seminars exceeded our initial expectations.

In the area of international cooperation, activities aimed at providing Japanese financial assistance to open access, such as SCOAP³ and arXiv, functioned as highly relevant pilot projects for Japan's promotion of open access. It should also be noted that the National Institute of Informatics (NII) took the lead in organizing domestic participants and continued to serve as Japan's overseas interface. The 2014 ORCID Outreach Meeting was held at NII. Parallel to this, participants have been dispatched almost every year to the Annual Meeting of COAR. Domestically, various activities were organized in

collaboration with the Cooperation Promotion Council which links between the National Institute of Informatics (NII) and university libraries and its various committees.

Activities based on close partnership with academic societies and others that characterized our endeavors through phase 3 have generally achieved their intended objectives. Regarding scholarly communication pursued under the leadership of individual academic societies, we appreciate that such academic societies expect us to continue managing partnership efforts in the publication of scholarly journals. With this in mind, we are committed to performing this role in the years to come.

During phase 4, in order to gather basic information on open access we undertook a survey of SCOAP³ related journals and the Survey of Publication of Articles in Open Access Journals (May 2014). We will continue to undertake such surveys in the future.

In closing, we take this opportunity to express our gratitude to all who participated in the activities of SPARC Japan, and we look forward to your continued support and cooperation.

April 1, 2016



Jun Adachi
Managing Director
International Scholarly Communication Initiative
SPARC Japan

1 Overview

1.1 Overview of Phase 4 Activities

1.1.1 Basic policy for phase 4

The basic policy is to take initiatives to promote open access in an international coalition, encourage distribution of academic information, and strengthen the capacity for information dissemination. In phase 4, we are encouraging closer cooperation between university libraries and researchers, while seeking to identify the issues for open access, studying measures to be taken by universities and other institutions, and carrying out related projects.

1.1.2 Project plans for phase 4

Plans for phase 4 of SPARC Japan are being carried out in the following three main areas, as decided in fiscal 2012 by the 2nd SPARC Japan Governing Board.

(1) Cooperating with international OA initiatives

As in phase 3, we continue to promote international scholarly communication platform provision by strengthening cooperation with SPARC and SPARC Europe, and in the case of individual projects, collaborating with SCOAP³, arXiv.org, ORCID, COAR, and other international initiatives.

(2) Deciding measures and creating an organizational structure for dealing with open access issues

We promote international scholarly communication platform provision while working with the Cooperation Promotion Council which links between the National Institute of Informatics (NII) and university libraries.

For the academic community to deal properly with changes in scholarly information distribution given the major changes in the business climate globally, university libraries, researchers, and the NII cooperate to identify the issues for open access and study measures to be taken by universities and other institutions. We also study ways of dealing with open access journals and the future of institutional repositories.

Advocacy activities continue so as to study issues related to open access. Efforts to gather information on domestic and worldwide trends continue, with the results being released domestically at SPARC Japan seminars and in other ways. These efforts include provision of opportunities for voluntary participation by university libraries, researchers, academic societies, and other members of this community, as well as reports aimed at timely information provision.

(3) Gathering basic information regarding open access

To gather and assess basic and quantitative information concerning academic society journals, the surveys on the state of scholarly information dissemination in Japan conducted in the previous phases continue in phase 4.

By surveying trends in use of and submissions to open access journals and institutional repositories, we endeavor to gather basic information.

1.2 Trends in Fiscal 2015

Based on the Project plans indicated in 1.1, the following were implemented in fiscal 2015.

1.2.1 SPARC Japan Seminar

SPARC Japan seminars were held four times during the fiscal year as advocacy activities. SPARC Japan Seminar Planning Working Group (WG) throughout the year was assigned to plan the annual theme and each seminar. Some of the WG members took charge of and implemented each seminar and put out newsletters after the seminar, with web editions, so as to inform the public in timely manner.

No. 26 (November 2015): *How Can We Evaluate the Work on Humanity and Social Sciences? - From the Scholarly Communication Point of View -*

No. 27 (November 2015): *Towards the New Paradigm of Science and Scholarly Communication Environment - E-Science, Research Data Sharing, and Research Data Infrastructures -*

No. 28 (February 2016): *Challenges and Possibilities of Emerging Research Information Platforms*

No. 29 (March 2016): *The Function of University Libraries in the Context of Research Promotion*

1.2.2 Surveys of overseas trends

We participated in the following international conferences and gathered information.

- (1) Two university librarians attended the Confederation of Open Access Repositories (COAR) Annual Meeting 2015 (2015/4/15–16, Porto, Portugal).
- (2) Two university librarians attended the 10th Annual International Conference on Open Repositories (OR2015) (2015/6/8–11, Indianapolis, US).
- (3) One NII lecturer attended the SPARC Meeting on Openness in Research & Education (2016/3/7–8, San Antonio, US).

1.2.3 Support for SCOAP³

Since the launch of SCOAP³ in 2014, NII has functioned as Japan's national contact point. During 2015, NII once again confirmed the intention of participation in the consortium as well as the relevant contact information of university libraries, and collected contribution fees and paid them on behalf of these partners. As of the end of March 2016, 34 Japanese institutions were participating in the consortium.

The number of scientific articles converted to open access by SCOAP³ has been steadily growing. The number of articles published in the relevant 10 journals numbered 3,552 in 2011, the base year for computation of contribution amounts. In comparison, the number of such articles totaled 4,280 in 2014 and 4,477 in 2015. During 2014–2015, the average article processing charge (APC) was 1,100 euros, which is lower than the APC level of gold open access journals.

Disclosure of the SCOAP³ repository, which lists SCOAP³ open-access articles, and its Application Programming Interface (API) has already been started. Repository disclosure is based on the assignment of Digital Object Identifier (DOI), CC BY license attribution, and XML format, and allows for text mining and data mining. It was reported that open-access articles reached the 10,000 mark in March 2016.

1.2.4 Support for arXiv.org

arXiv.org is a preprint server in the field of physics operated by Cornell University Library. The number of available articles passed the one million mark in December 2014. The number of new submissions comes to 90,000 per year, and the number of downloads currently stands at about 81 million per year. Financial assistance is provided from top high-volume user organizations, and a total of 183 institutions from 24 countries are participating in the 2013–17 arXiv membership program.

NII has supported arXiv.org in Japan by contacting universities to confirm their intent to participate. Questionnaires were sent to the universities ranked in the top 300 users to ascertain their intent to apply for membership. As a result, a total of 13 Japanese institutions are registered members.

An inquiry was received from Cornell University in April 2014 concerning formation of a consortium of Japanese members. Following confirmation with members, a consortium agreement was concluded resulting in a 10 percent reduction in membership fees for consortium members.

In fiscal 2015, the consortium was formally named the Consortium of Japanese Research Libraries: Coordinated by National Institute of Informatics (NII), abbreviated as NII Japan Consortia. Director-General Takashi Hikihara of Kyoto University Library Network was appointed representative of NII Japan Consortia and will begin to participate in the Member Advisory Board (MAB) of arXiv.org in 2016.

1.2.5 Support for ORCID Outreach Meetings

ORCID Outreach Meetings are convened to publicize ORCID activities as well as to discuss and report on ORCID-related institutions and individuals and on the circulation of information on author identifiers and distribution of scholarly information and academic resources. NII Associate Professor Kei Kurakawa attended the ORCID Outreach and Board Meeting held in May 2015 and also NII Professor Hideaki Takeda attended the Outreach and Board Meeting held in November 2015 and the Board Meeting held in February 2016 and participated in activities for promoting the use of author identifiers.

1.2.6 Study on OA Publishing and APC Spend in Japan

We have collaborated with the Japan Alliance of University Library Consortia for E-Resources (JUSTICE) to organize a team for studying the current status of open-access scholarly papers. The team is currently engaged in a study of open-access papers and article processing charges (APC) in Japan.

1.2.7 Publication of Fiscal 2014 SPARC Japan Annual Report

Activities undertaken during fiscal 2014 were summarized in an annual report (Japanese version) published in September 2015 and the annual report FY2013 in English was published in February 2016.

2 Record of Meeting

2.1 SPARC Japan Governing Board

Date	Agenda
August 4, 2015	1. Summary of minutes of the last meeting (draft) 2. Plans for the activities of SPARC Japan Seminars in fiscal 2015 [discussion] 3. Support for the symposium about open access policy of HORIZON2020 and international issues of open science 4. Study on OA publishing and APC spend of researchers in Japan [discussion] 5. Summary of phase 4 of SPARC Japan [discussion] 6. Basic policy for phase 5 of SPARC Japan [discussion] 7. Others
November 30, 2015	1. Summary of minutes of the last meeting (draft) 2. Basic policy for phase 5 (fiscal 2016-2018) of SPARC Japan (draft) [discussion] 3. Plans for the activities of SPARC Japan in fiscal 2016 [discussion] 4. Extension of the MoU between SPARC and NII 5. Activity of the team for studying on OA publishing and APC spend in Japan 6. Others
March 24, 2016	1. Summary of minutes of the last meeting (draft) 2. Report on the activities of SPARC Japan in fiscal 2015 3. Activity of the team for studying on OA publishing and APC spend in Japan 4. Plan in phase 2 of SCOAP ³ 5. Basic policy for phase 5 (fiscal 2016-2018) of SPARC Japan (draft) [discussion] 6. Plans for the activities of SPARC Japan in fiscal 2016 [discussion] 7. Establishment of a planning working group for SPARC Japan Seminar 2016 [discussion] 8. Others

3 List of Members

3.1 SPARC Japan Governing Board

Name	Title / Affiliation
Hiroshi Itsumura	Professor, Master's and Doctoral Programs of Library, Information and Media Studies, University of Tsukuba
Hiroshi Imai	Professor, Graduate School of Information Science and Technology, University of Tokyo
Shigefumi Mori	Professor, Research Institute for Mathematical Sciences, Kyoto University
Syun Tutiya	Professor, National Institution for Academic Degrees and University Evaluation
Keiko Kurata	Professor, Faculty of Letters, Keio University
Tomio Kobayashi	Professor, High Energy Accelerator Research Organization (KEK) Head, International Cooperation Office
Yasunori Fukagai	Professor, Graduate School of International Social Sciences International Social Sciences Section, Yokohama National University Director, Yokohama National University Library
Koichi Ojira	General Manager, the University of Tokyo Library System

Masayuki Shoji	General Manager, Waseda University Library
Kazuhiro Hayashi	Senior Research Fellow, National Institute of Science and Technology Policy
Jun Adachi	Deputy Director General, National Institute of Informatics
Kiyohiko Sakai	Deputy Director, Cyber Science Infrastructure Development Department, National Institute of Informatics

3.2 Planning Working Group for SPARC Japan Seminar 2015

Name	Title / Affiliation
Shigetoshi Kajiware	Librarian, Hokkaido University Library
Keiko Yokoi	Librarian, the University of Tokyo Library System
Kazuhiro Hayashi	Senior Research Fellow, National Institute of Science and Technology Policy
Shinji Mine	Senior Lecturer, Faculty of Humanities, Law and Economics, Mie University
Shoji Komai	Associate Professor, Nara Institute of Science and Technology
Nami Hoshiko	Librarian, Kyushu University Library
Midori Ichiko	Administrative Director, Hiyoshi Media Center, Keio University
Kei Kurakawa	Associate Professor, National Institute of Informatics

4 Record of SPARC Japan Seminar 2015

	Date / Place	Title	Speaker	Attendees
1	September 30, 2015 13:00 - 17:00 National Institute of Informatics	"How Can We Evaluate the Work on Humanity and Social Sciences? - From the Scholarly Communication Point of View -"	<ul style="list-style-type: none"> ○Shoji Komai (Nara Institute of Science and Technology) ○Hisashi Nakao (Yamaguchi University) ○Ko Nomura (Nagoya University) ○Kiyonori Nagasaki (International Institute for Digital Humanities) ○Masaki Nakamura (Osaka University) ○Ikuya Sato (Hitotsubashi University) ○Hiroya Takeuchi (Chiba University) ○Keiko Yokoi (The University of Tokyo Library System) [Moderator] 	95
2	October 21, 2015 10:15 - 17:45 National Institute of Informatics	"Towards the New Paradigm of Science and Scholarly Communication Environment - E-Science, Research Data Sharing, and Research Data Infrastructures -" Open Access Summit 2015 "Open Access Week 2015 "Open for Collaboration"-	<ul style="list-style-type: none"> ○Mark Parsons (Research Data Alliance) ○Asanobu Kitamoto (National Institute of Informatics) ○Daisuke Ikeda (Kyushu University) ○Masahito Nosé (Kyoto University) ○Takafumi Kato (Japan Science and Technology Agency) ○Yoshimasa Tanaka (National Institute of Polar Research) ○Keizo Oyama (National Institute of Informatics) ○Nami Hoshiko (Kyushu University Library) ○Hideaki Takeda (National Institute of Informatics) [Moderator] ○Kei Kurakawa (National Institute of Informatics) [Moderator] 	100
3	January 19, 2016 13:00 - 17:00 National Institute of Informatics	"Challenges and Possibilities of Emerging Research Information Platforms"	<ul style="list-style-type: none"> ○Jeroen Bosman (Utrecht University Library) ○Keita Bando (Coordinator for the Online Platform for Scientific Communication) ○Fujio Toriumi (The University of Tokyo) ○Jun Tarui (University of Electro-Communications) ○Kazuhiro Hayashi (National Institute of Science and Technology Policy) ○Shinji Mine (Mie University) ○Keiko Yokoi (The University of Tokyo Library System) [Moderator] 	87
4	March 9, 2016 13:00 - 17:15 Bellesalle Jimbocho Annex	"The Function of University Libraries in the Context of Research Promotion"	<ul style="list-style-type: none"> ○Koichi Ojio (The University of Tokyo Library System) ○Takashi Hikihara (Kyoto University) ○Hiroshi Manago (Cabinet Office, Government of Japan) ○Setsuo Arikawa (Kyushu University) ○Midori Ichiko (Hiyoshi Media Center, Keio University) ○Nami Hoshiko (Kyushu University Library) [Moderator] 	161
	Total			443
	Average			111

5 History

Fiscal Year	Council / Governing Board Meeting	Event	Related Event / Others
2003	06/25 The 1st Council Meeting		
	07/14 Recruitment of Participating Journals	07/02 Briefing on Project Concept for Academic Societies, at Japan Education Center	
	08/01 The 1st Governing Board Meeting		
	09/11 The 2nd Governing Board Meeting	08/19 Briefing on Project Concept, at Tohoku University	
	09/17 The 2nd Council Meeting (Adoption of Participating Journals)		
	09/17 Press Release		
	10/08 Joint Meeting of Working Groups		11/05 The 5th Library Fair & Forum “ SPARC Japan: Transforming International Scholarly Communication in Japan” at Tokyo International Forum, sponsored by Japan Council of National University Libraries and Japan Association of Private University Libraries
		01/21-29 Briefing on Project Euclid, at National Center of Sciences, Tohoku University, Kyoto University and Nagoya University	11/20 Japan Council of National University Libraries Task Force on E-Journal started negotiation with publishers in Biological Science, Physics, and Medicine.
		02/23 SPARC Japan Meeting Report and Briefing on Concept of New Journals at National Center of Sciences	
	03/22 The 3rd Governing Board Meeting	03/11 SPARC Japan Seminar “Future Perspective of Scholarly Communication in Biological Sciences -UniBio Press Mission”, at The University of Tokyo library	
2004	03/23 The 3rd Council Meeting		
	05/28 The 1st Governing Board Meeting		
	06/02 The 1st Council Meeting		

	<p>06/07 Recruitment of Participating Journals</p> <p>09/15 The 2nd Governing Board Meeting</p> <p>09/22 The 2nd Council Meeting (Adoption of Participating Journals)</p> <p>10/14 Joint Meeting of Working Groups</p>	<p>07/07 Briefing on Project Concept for Academic Societies, at National Center of Sciences</p> <p>09/27 Project Euclid Meeting, Briefing on DPubS</p> <p>10/15 Symposium “Current Issues on Scholarly Publishing to Advance Scholarly Communication～SPARC Japan as an Example” at Hiroshima University Library, Co-sponsored by Hiroshima University Library, the Japan Association of National University libraries(JANUL) Committee on Scholarly Information, NII</p> <p>10/19 Symposium “Future Prospects on Japanese Scholarly Journals”, at Waseda University Center for Scholarly Information, Co-sponsored by The Society of Polymer Science, The Institute of Electronics, Information and Communication Engineers, Committee of Tohoku Mathematical Journal, The Japan Society of Mechanical Engineers, The Japan Institute of Metals and Materials, The Zoological Society of Japan, The Japan Society for Analytical Chemistry, Japanese Society of Mammalian Ova Research, The Mammal Society of Japan, NII</p> <p>11/05 OUP Meeting “Current Situation of Open Access”</p> <p>11/25 The 6th Library Fair & Forum “Trends in Scholarly Communication: Open Access and Self-Archiving”, at Pacifico Yokohama</p> <p>01/27 Workshop “Business Models for E-Journals and Trends in Scholarly Publishing”, at Japan Education Center</p> <p>03/24 Symposium “Current Trends and Issues around SPARC: Scholarly Journals, Institutional Repositories and Open Access”, at Waseda University</p>	<p>07/01 Presentation on Activities of SPARC Japan at workshop of JANUL(Japan Association of National University Libraries) general meeting, at Osaka University Convention Center</p> <p>10/19-20 Participation in the Project Euclid DPubS Conference, at Cornell University, US</p>
2005	<p>03/07 The 3rd Governing Board Meeting</p> <p>03/10 The 3rd Council Meeting</p> <p>06/06 The 1st Governing Board Meeting</p>	<p>05/19 The 1st SPARC JAPAN Seminar 2005 “Learning from history of Nature - Editorial Policies at Nature”</p>	

		03/05 The 7th SPARC Japan Seminar 2006 “Measuring Performance of Journals/Articles by Bibliometrics”	
2007	<p>06/12 Joint Meeting / SPARC Japan Partners</p> <p>07/19 The 1st Governing Board Meeting</p> <p>12/14 SPARC Japan Partners-University Libraries Joint Meeting “Forming a consortium of SPARC Japan Partners”</p> <p>02/29 The 2nd Governing Board Meeting</p>	<p>07/17 The 1st SPARC Japan Seminar 2007 “Measuring Performance of Journals/Articles by Bibliometrics - Series 2”</p> <p>10/02 The 2nd SPARC Japan Seminar 2007 “Evaluating Online Submission and Review System Part 3 – For Better System”</p> <p>11/02 The 3rd SPARC Japan Seminar 2007 “Current State of Metadata Publishing - Things Needed for Production and Publishing of Electronic Journals”</p> <p>11/09 Presentation at The 9th Library Fair & Forum “Challenges for Japanese Leading E-journals: Proposals from SPARC Japan Partners” at Pacifico Yokohama</p> <p>01/17 The 4th SPARC Japan Seminar 2007 (SPARC Japan-ALPSP Special Seminar) “Journal Publishing and Scholarly Societies”</p> <p>01/18 ALPSP Training Course “Introduction to Journal Publishing”</p>	<p>05/15 UniBio Press Seminar “Challenges for Journal of Biological Sciences: for broader and more accurate dissemination of information” at National Center of Sciences</p> <p>05/17 UniBio Press Seminar “Challenges for Journal of Biological Sciences: for broader and more accurate dissemination of information” at Kyoto University Library</p> <p>08/05-11 Participation in the 41st IUPAC Congress (International Union of Pure and Applied Chemistry), Torino, Italy</p> <p>08/20-22 Participation in the 234th ACS (American Chemical Society) National Meeting & Exposition, Boston, US</p> <p>11/07-09 Participation in The 9th Library Fair & Forum, at Pacifico Yokohama</p>
2008		04/22 The 1st SPARC Japan Seminar 2008 “The Future of Academic Journals as a Means of Disseminating Research Results”	06/15-17 SPARC Japan Partners exhibited at the SLA 2008 Conference (Special Libraries Association), Seattle, US

	<p>06/24 The 2nd SPARC Japan Seminar 2008 “Academic Publishing and the Approach to XML - Issues in Japan”</p> <p>07/10 The 3rd SPARC Japan Seminar 2008 “The Status of Consortium in Korea - For Expanding our Global Presence”</p> <p>09/02-03 The 4th SPARC Japan Seminar 2008 (RIMS Workshop) “Digitization of Bulletin and the Surrounding Issues” at Research Institute for Mathematical Sciences, Kyoto University</p> <p>10/14 The 5th SPARC Japan Seminar 2008 “What is the most appropriate OA model for Japan?”</p> <p>11/17-18 SPARC Digital Repositories Meeting 2008, Baltimore, US Co-hosted by SPARC, SPARC Europe and SPARC Japan</p> <p>11/25 The 6th SPARC Japan Seminar 2008 “Beyond IF - we need some different perspectives”</p> <p>11/27 The 7th SPARC Japan Seminar 2008 (The 10th Library Fair & Forum 2008, Scientific Information Open Summit) “Open Access Update”</p> <p>12/16 The 8th SPARC Japan Seminar 2008 “E-Journal Platforms that fit the requirements in Japan”</p>	<p>06/26 Participation in the 55th General Assembly of JANUL (Japan Association of National University Libraries), at Tohoku University</p> <p>07/13-15 Participation in The General Conference of the Chinese Chemical, Tianjin, China</p> <p>08/17-19 Participation in the 236th ACS (American Chemical Society) National Meeting & Exposition, Philadelphia, US</p> <p>09/11-12 Participation in the General Conference of JASPUL (Japan Association of Private University Libraries), at Kokugakuin University</p> <p>09/16-20 Participation in the 2nd EuCheMS Chemistry Congress, Torino, Italy</p> <p>09/25-26 Presentation at KESLI (Korean Electronic Site License Initiative), Daejeon, Korea</p> <p>10/12-15 Promotion at the 15th North American ISSX (International Society for the Study of Xenobiotics) Meeting, San Diego, US</p> <p>10/27-30 Participation in ISAP2008 (International Symposium on Antennas and Propagation), Taipei, Taiwan</p> <p>11/13-14 Participation in the INFOPRO2008, at National Museum of Emerging Science and Innovation</p>
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	<p>12/24 The 1st Governing Board Meeting</p> <p>03/10 The 2nd Governing Board Meeting</p> <p>03/27 Joint Meeting / SPARC Japan Publishing Partners</p> <p>03/27 The 3rd Governing Board Meeting</p>	<p>01/22-26 Project Euclid-Mathematics Journals Meeting at National Institute of Informatics, Kyoto University and Tokyo Institute of Technology</p> <p>02/13 The 9th SPARC Japan Seminar 2008 "Report from SPARC Japan Partners"</p>	<p>12/17-20 Participation in the International Conference on Embedded and Ubiquitous Computing (EUC 2008), Shanghai, China</p> <p>03/16-20 Participation in the 2009 APS (American Physical Society) Meeting, Pittsburgh, US</p>
2009	<p>10/05 The 1st Governing Board Meeting</p>	<p>06/25 The 1st SPARC Japan Seminar 2009 "Voluntary publication from researchers through a variety of network media in quest of dissemination to the general public"</p> <p>08/04 The 2nd SPARC Japan Seminar 2009 "Sustainability of non-profit publishers - learning from OUP"</p> <p>09/08-09 The 3rd SPARC Japan Seminar 2009 (RIMS Workshop) "Towards a Digital Mathematics Library"</p> <p>09/17 The 4th SPARC Japan Seminar 2009 (Annual Meeting of the Zoological Society of Japan) "ZS Project"</p> <p>10/20 Open Access Week (The 5th SPARC Japan Seminar 2009) "An open access business model and researchers' attitudes"</p> <p>11/11 The 6th SPARC Japan Seminar 2009 (Library Fair & Forum) "NIH Public Access Policy"</p> <p>12/11 The 7th SPARC Japan Seminar 2009 "Status of Social Sciences Journals - Issues of IR, Copyright, E-journals"</p> <p>02/02 The 8th SPARC Japan Seminar 2009 "Marketing to Libraries Worldwide"</p>	<p>11/25 SPARC Japan Publishing Partners in Chemistry Participated in the APBioChEC (Asia Pacific Biochemical Engineering Conference) 2009, at Kobe Convention Center</p> <p>12/03-04 DRF International Conference 2009 (DRFIC 2009), Co-hosted by DRF and NII, at Tokyo Institute of Technology</p>

		02/03 ALPSP Training Course “Effective Journals Marketing”	
	03/23 The 2nd Governing Board Meeting		
2010		06/23 The 1st SPARC Japan Seminar 2010 “Work and Management of Academic Societies” 07/06 The 2nd SPARC Japan Seminar 2010 “Journal Publishing - Current Situation of Overseas Academic Societies” 08/24 The 3rd SPARC Japan Seminar 2010 “The Work of Libraries - Subscription and Use of Academic Journals” 09/16 The 4th SPARC Japan Seminar 2010 (RIMS Workshop) “Towards a Digital Mathematics Library” 09/24 The 5th SPARC Japan Seminar 2010 (Annual Meeting of the Zoological Society of Japan) “A look ahead to the next decade of scholarly communications in Japan” 10/20 The 6th SPARC Japan Seminar 2010 (Open Access Week) “Open Access Disseminated from Japan” 11/08- 09 The SPARC Digital Repositories Meeting 2010, Baltimore, US, Co-sponsored by SPARC, SPARC Europe and SPARC Japan 12/10 Joint Symposium “Open Access Policy for the Dissemination of the Research Outcomes from Universities” at Iron Gate Memorial Hall, The University of Tokyo 01/14 The 7th SPARC Japan Seminar 2010 “Author ID: Recent Developments” 02/03 The 8th SPARC Japan Seminar 2010 “Impact and Position of Japanese Journals/Articles in the World”	08/19 Participation in the International Congress of Mathematicians (ICM), Hyderabad, India 08/22- 26 Participation in the 240th ACS (American Chemical Society) National Meeting and Exposition, Boston, US 08/29-09/02 Participation in the 3rd EuCheMS Chemistry Congress, Nurnberg, Germany

		03/08 MoU Signing Event between German National Library of Science and Technology (TIB) / German National Library of Medicine (ZB MED) / National Institute of Informatics (NII) Symposium: "The Future of Scholarly Communication Infrastructure in German and Japan"	
	03/16 The 1st Governing Board Meeting		
2011	10/06 The 1st Governing Board Meeting	<p>10/28 The 1st SPARC Japan Seminar 2011 (Open Access Week) "Current Situation and Strategy of Open Access from Viewpoints of Journal Publishing"</p> <p>12/06 The 2nd SPARC Japan Seminar 2011 "Workshop for Contemporary Reference Management Tools"</p> <p>01/31 The 3rd SPARC Japan Seminar 2011 "New Movement of the Distribution on Scholarly Information - Open Access for Researchers and Academic Societies"</p> <p>02/10 The 4th SPARC Japan Seminar 2011 "Distribution of Academic Information: Open the Way to the Future - Crisis of Online Journal and Open Access"</p> <p>02/29 The 5th SPARC Japan Seminar 2011 "Burgeoning Open Access MegaJournals"</p> <p>03/26 The 6th SPARC Japan Seminar 2011 (Project Euclid & Mathematical Society of Japan, Joint Workshop) "Workshop on Mathematics Publishing"</p>	<p>08/28-09/01 Participation in the 242nd ACS (American Chemical Society) National Meeting & Exposition, Denver, US</p> <p>09/04-09 Participation in the 14th Asian Chemical Congress 2011, Bangkok, Thailand</p> <p>10/26 Presentation at the 2011 Open Access Korea (OAK) Conference, Seoul, Korea by Jun Adachi "Open Access in Japan: 2011 Updates"</p>
	03/27 The 2nd Governing Board Meeting		

2012	<p>12/10 The 1st Governing Board Meeting</p> <p>03/26 The 2nd Governing Board Meeting</p>	<p>05/25 The 1st SPARC Japan Seminar 2012 “Review of Research Assessment”</p> <p>06/19 The 2nd SPARC Japan Seminar 2012 “Further Progress of Journals - Focusing on Platform Transfer”</p> <p>07/25 The 3rd SPARC Japan Seminar 2012 “Reform: Grants-in-Aid for Scientific Research (Publication of Research Results/Scientific Periodicals)”</p> <p>08/23 The 4th SPARC Japan Seminar 2012 “Open Access Journal: Funder-Researcher Collaboration in Science Communication”</p> <p>10/26 The 5th SPARC Japan Seminar 2012 “Open Access Week - Open Access in Japan, Last Decade and Next Decade”</p> <p>12/04 The 6th SPARC Japan Seminar 2012 “How Open Access Can Change Libraries & Librarians - Course on Open Access for Libraries & Librarians”</p> <p>02/19 The 7th SPARC Japan Seminar 2012 “Libraries' Financial Support for Open Access”</p>	<p>07/02-07 Participation in the 6th European Congress of Mathematics (ECM), Kraków, Poland</p> <p>08/19-21 Participation in the 244th ACS (American Chemical Society) National Meeting & Exposition, Philadelphia, US</p> <p>08/26-30 Participation in the 4th EuCheMS Chemistry Congress, Prague, Czech Republic</p> <p>12/26-27 Keynote Speech at RIMS Joint Research, Kyoto University</p>
2013		<p>06/07 The 1st SPARC Japan Seminar 2013 “Future Perspective: SPARC and SPARC Japan”</p> <p>08/23 The 2nd SPARC Japan Seminar 2013 “Latest Developments in Open Access - Humanities and Social Sciences -”</p> <p>10/25 The 3rd SPARC Japan Seminar 2013 “Redefining the Impact of Research Outputs in the Age of Open Access: Current State of Reuse and Altmetrics”</p> <p>12/19 The 4th SPARC Japan Seminar 2013 “Accessing & Publishing of Academic Information- Think Globally, Act Locally”</p>	<p>08/06 The 1st Working Group Meeting for Survey on Submission to OA Journals</p> <p>10/02 The 2nd Working Group Meeting for Survey on Submission to OA Journals</p> <p>12/04 MOU Conclusion on SCOAP³ with CERN</p> <p>01/27 Keynote Speech at RIMS Joint Research, Kyoto University</p>

	03/24 The 1st Governing Board Meeting	02/07 The 5th SPARC Japan Seminar 2013 “Winds of Change: The Past, Present, and Future of Open Access in Asia”	03/02 Participation in the COAPI Meeting, Kansas City, US 03/03-04 Participation in the 2014 SPARC Open Access Meeting, Kansas City, US 03/13 The 3rd Working Group Meeting for Survey on Submission to OA Journals
2014	01/15 The 1st Governing Board Meeting 03/19 The 2nd Governing Board Meeting	08/04 The 1st SPARC Japan Seminar 2014 “How Do We Face APCs? - Perspective of APCs Through Trends and Surveys In and Outside of Japan -” 09/26 The 2nd SPARC Japan Seminar 2014 “Institutional Open Access Policy : Toward the Development of Japanese Models” 10/21 The 3rd SPARC Japan Seminar 2014 “Science for ‘Generation Open’” Open Access Summit 2014 -Open Access Week 2014 “Generation Open”- 03/09 The 4th SPARC Japan Seminar 2014 “What Should We Do to Expand Green Content?”	05/21-23 Participation in the COAR (Confederation of Open Access Repository) 2014 Annual meeting, Athens, Greece 06/09-13 Participation in the OR2014 (The 9th Annual International Conference on Open Repositories), Helsinki, Finland
2015	08/04 The 1st Governing Board Meeting	09/30 The 1st SPARC Japan Seminar 2015 “How Can We Evaluate the Work on Humanity and Social Sciences? - From the Scholarly Communication Point of View -”	04/15-16 Participation in the COAR (Confederation of Open Access Repository) 2015 Annual meeting, Porto, Portugal 05/18-20 Participation in the ORCID-CASRAI Joint Outreach Conference & Codefest and the ORCID Board Meeting, Barcelona, Spain 06/08-11 Participation in the OR2015 (The 10th Annual International Conference on Open Repositories), Indianapolis, US

		10/21 The 2nd SPARC Japan Seminar 2015 “Towards the New Paradigm of Science and Scholarly Communication Environment - E-Science, Research Data Sharing, and Research Data Infrastructures -” Open Access Summit 2015 -Open Access Week 2015 “Open for Collaboration”-	
11/30	The 2nd Governing Board Meeting	01/19 The 3rd SPARC Japan Seminar 2015 “Challenges and Possibilities of Emerging Research Information Platforms”	11/03-06 Participation in the ORCID Outreach Meeting & Codefest, in November 2015 and the ORCID Board Meeting, San Francisco, US
		03/09 The 4th SPARC Japan Seminar 2015 “The Function of University Libraries in the Context of Research Promotion”	02/02-03 Participation in the ORCID Board Meeting, London, UK
03/24	The 3rd Governing Board Meeting		03/07-08 Participation in the SPARC Meeting on Openness in Research & Education, San Antonio, US

6 Publication

6.1 SPARC Japan Annual Report

- SPARC Japan (International Scholarly Communication Initiative) Annual Report FY2013
http://www.nii.ac.jp/sparc/en/publications/pdf/sparc_annual_2013-E.pdf

6.2 SPARC Japan NewsLetter

- SPARC Japan NewsLetter No. 26, Nov. 2015
<http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter26E.pdf>
- SPARC Japan NewsLetter No. 27, Nov. 2015
<http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter27E.pdf>
- SPARC Japan NewsLetter No. 28, Feb. 2016
<http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter28E.pdf>
- SPARC Japan NewsLetter No. 29, Mar. 2016
<http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter29E.pdf>

6.3 Reference for SPARC Japan Seminar 2015

【The 1st SPARC Japan Seminar 2015】 September 30, 2015

“How Can We Evaluate the Work on Humanity and Social Sciences? - From the Scholarly Communication Point of View -”

<http://www.nii.ac.jp/sparc/event/2015/20150930.html>

Opening Greeting/Outline: Shoji Komai, Nara Institute of Science and Technology (NAIST)

“Fundamental Issue: What Are the Humanities and Social Sciences?”

Hisashi Nakao, Yamaguchi University

“The Importance of Multifaceted Evaluation in the Social Sciences: Extrapolating from Political Science and Environmental Studies ”

Ko Nomura, Nagoya University

“What Is the Goal of Research Evaluation in the Humanities and Social Sciences?”

Kiyonori Nagasaki, International Institute for Digital Humanities

“Research Evaluation and the Promotion of Responsible Research”

Masaki Nakamura, Osaka University

“Research Assessment and Its Impact on Humanities and Social Science Research in the UK”

Ikuya Sato, Hitotsubashi University

【The 2nd SPARC Japan Seminar 2015】 October 21, 2015

“Towards the New Paradigm of Science and Scholarly Communication Environment - E-Science, Research Data Sharing, and Research Data Infrastructures -”

Open Access Summit 2015 -Open Access Week 2015 “Open for Collaboration”-

<http://www.nii.ac.jp/sparc/en/event/2015/20151021en.html>

Opening Greeting/Outline: Jun Adachi, National Institute of Informatics

“Open Data is not Enough” Mark Parsons, Research Data Alliance

“Design of Research Infrastructure and Utilization of Research Data for Breaking through

‘Research Barriers’” Asanobu Kitamoto, National Institute of Informatics

“Inductively Think about Impacts of Open Platforms on Research”

Daisuke Ikeda, Department of Informatics, Kyushu University

“Research data sharing in the field of solar-terrestrial physics”

Masahito Nosé, Graduate School of Science, Kyoto University

“Research data infrastructure of Japan” Takafumi Kato, Japan Science and Technology Agency

“Database for upper atmospheric science -Activity of the IUGONET project-”

Yoshimasa Tanaka, National Institute of Polar Research

“Sharing Data Sets as Research Resources” Keizo Oyama, National Institute of Informatics

“Introductory Guide of Open Data for Administrative Staff”

Nami Hoshiko, Kyushu University Library

【The 3rd SPARC Japan Seminar 2015】 January 19, 2016

“Challenges and Possibilities of Emerging Research Information Platforms”

<http://www.nii.ac.jp/sparc/en/event/2015/20160119en.html>

Opening Greeting/Outline: Shinji Mine, Mie University

“The Slow Revolution in Scholarly Communication and How Libraries Can Adapt Their Perspective” Jeroen Bosman, Utrecht University Library

“A Brief Review of ‘Social Networks for Scientists’”

Keita Bando (Coordinator for the Online Platform for Scientific Communication)

“SNS for Researchers: ResearchGate”

Fujio Toriumi, Graduate School of Engineering, The University of Tokyo

“Are Blogs Useful for Research? How?”

Jun Tarui, Graduate School of Informatics and Engineering, University of Electro-Communications

【The 4th SPARC Japan Seminar 2015】 March 9, 2016

“The Function of University Libraries in the Context of Research Promotion”

<http://www.nii.ac.jp/sparc/event/2015/20160309.html>

Outline: Nami Hoshiko, Kyushu University Library

“Promotion of Open Access and Research Support - New Challenges for University Libraries”

Koichi Ojio, The University of Tokyo Library System

“What the Formulation of Open Access Policies Means for Research Support”

Takashi Hikihara, Kyoto University

“Promoting Open Science” Hiroshi Manago, Cabinet Office, Government of Japan

“The Role of University Libraries in the Advancement of Research in Japan”

Setsuo Arikawa, Kyushu University



■ The 1st SPARC Japan Seminar 2015

“How can we evaluate the work on Humanity and Social Sciences?”

— From the scholarly communication point of view —

Wednesday, September 30, 2015: National Institute of Informatics
12th floor conference room (Attendees: 95)

Participants in the 1st SPARC Japan Seminar of 2015 explored such topics as recent trends in humanities and social science research evaluation and Britain’s research assessment initiative. They also discussed the role universities and libraries can play now and in the future in research evaluation and support in the social sciences and humanities, including development of infrastructure, in the light of various ongoing initiatives to promote scholarly communication.

A summary of the seminar is given below. See the SPARC Japan website

(<http://www.nii.ac.jp/sparc/event/2015/20150930.html>) for handouts and other details.

Presentations

Fundamental Issue: What Are the Humanities and Social Sciences?

Hisashi Nakao
(Yamaguchi University)

Focusing on the nature of the humanities, the presentation highlights three core ideas: (1) The human sciences are by nature highly diverse. (2) It is wrong to frame the issue of research evaluation as a problem specific to the humanities and social sciences. (3) Who should be responsible for evaluation?

It has been suggested that the humanities have their own unique mission and should be approached as “slow science.” But in reality, there is an important role for research papers as well as books, and there is no reason why research in the humanities should be uniformly slow. The humanities should be able to accommodate a variety of approaches, not just one.

In fact, there have always been lines of research that defy the traditional “humanities/social science/natural science” classification. Moreover, the boundaries between those categories are becoming increasingly blurred. How to establish criteria for good research amid this increasing diversity is a challenge confronting academia as a whole, not something to be approached in a compartmentalized manner, field by field.

Whether or not a given type of research can be evaluated quantitatively, researchers should not simply leave the criteria to the evaluators. We need to develop diverse assessment criteria through a process of dialogue, exchanging information as we go.

The Importance of Multifaceted Evaluation in the Social Sciences: Extrapolating from Political Science and Environmental Studies

Ko Nomura
(Nagoya University)

Research results in the field of political science are often more difficult to express numerically than those in the natural sciences. Owing to the academic culture, moreover, there is an emphasis on single-author books and academic society bulletins. Furthermore, digitization of research outputs is still a work in progress. And since papers in the social sciences tend to be long, single-author works and written in Japanese, both research outputs and the frequency of citations tend to be lower than in the natural sciences. Evaluation must take into account disparities in the way research is presented in different fields. If standards are slanted too heavily toward such quantitative criteria as the number of papers published, it could create incentives for doing research that yields quick results, which would be detrimental to the development of the field. Since an important aspect of social science is its impact—that is, its contribution to our understanding of society and our efforts to solve social issues—research also needs to be evaluated in terms of its contribution to the development of the field and its broader social impact. In the area of environmental studies, the existing criteria for university evaluation (ranking, etc.) have been criticized as discouraging activism, and some have called for assessment of research in terms of its social orientation and actual contribution. In the United States, some institutions have adopted Sustainability Tracking, Assessment & Rating

System (STARS) as an alternative assessment index. In the social sciences, research evaluation should be multifaceted, tailored to the character of each discipline, and oriented to concrete social issues.

What Is the Goal of Research Evaluation in the Humanities and Social Sciences?

Kiyonori Nagasaki

(International Institute for Digital Humanities)

Whether gauged by funding or by numbers of researchers, the humanities and social sciences represent only a small fraction of all academic research carried out in Japan. Yet judging from the Science and Technology Basic Plan and other official documents, the government expects quite a lot from the social sciences and humanities. One key issue when it comes to the evaluation of research in the humanities and social sciences is that of society's assessment versus the assessment of academia. The former may not take shape immediately. And the latter will vary depending on the purpose, whether it be review within the field, university personnel decisions, or world university rankings. Among the challenges we face are those of reconciling these divergent criteria with society's demands and of incorporating assessment standards that accommodate new research trends. We will need new and creative approaches to quantitative and qualitative assessment to meet these challenges. For publications carried by such digital libraries as J-Stage and CiNii Articles, providing citation information is one possibility. Interdisciplinary academic societies in the digital humanities field have been addressing these issues from various angles, and we should make the most of the resources they have to offer. American learned societies in the traditional disciplines of literature and history have published guidelines for evaluating digital research outputs, which may also be of use.

Research Evaluation and the Promotion of Responsible Research

Masaki Nakamura

(Osaka University)

This presentation explores the issue of research evaluation from the standpoint of research misconduct and research ethics education. As Japan takes steps to prevent research fraud and misconduct, guidelines published by the Ministry of Education, Culture, Sports, Science and Technology highlight the responsibility of universities and other research institutions, calling on them to adopt such organizational measures as research ethics education and systems for preservation and disclosure of research data. But are these measures sufficient? Unethical research

practices include such behavior as multiple submissions of papers and false or misleading authorship practices, as well as specific instances of fabrication, falsification, and plagiarism (FFP). However, after much debate, the US federal government has adopted a definition of research misconduct that is limited to FFP and ignores other serious deviations from accepted standards of research practice. Nonetheless, debate continues on how to deal with questionable research practices other than FFP, and the focus is now shifting to the promotion of "responsible conduct of research" (RCR). Questionable research practices other than FFP are very widespread, although the frequency varies, and prevention needs to be approached via the basic factors that foster RCR: research environment, reward system, and educational process. We also need to consider policies to promote high-value research so as to reduce "research waste." In this context, debate is likely to focus on development of research systems to guarantee high-value research and design of evaluation systems that factor in the reputation of the researchers.

Research Assessment and Its Impact on Humanities and Social Science Research in the UK

Ikuya Sato

(Hitotsubashi University)

In the UK, efforts to assess research performance at a national level began in 1986 with the Research Selectivity Exercise. Subsequently, the Research Assessment Exercise (RAE) was conducted four times between 1992 and 2008, and the Research Excellence Framework (REF) was implemented in 2014. Most UK universities have taken part in the RAE/REF. In 2014, the program reviewed some 200,000 research outputs by about 50,000 researchers. The cost of the review has been extremely high. Since the assessment outcomes impact the allocation of funding, competition among institutions has intensified year by year. Currently it has reached the point where anything less than a perfect rating is considered worthless. The system has also been criticized for further increasing the functional division between teaching universities and research universities. High ratings give institutions an advantage in securing outside funding, which enables them to secure even higher ratings, and so forth.

Supporters of the RAE/REF argue that it (1) creates accountability regarding government expenditure on research, (2) applies meritocratic principles to support high-quality research, and (3) uses competition to encourage efficient research activity. Critics, meanwhile, contend that

institutions have begun “gaming the system” to enhance their ratings. Specifically, they claim that the framework has fueled rampant headhunting of star researchers, a bias toward easily publishable research, and massive output of unimaginative research lacking in novelty or creativity. Some have also complained that it deemphasizes educational and administrative functions of higher education that have no direct impact on ratings.

In the social sciences, the form of publication has been shifting from books to papers, suggesting that researchers may be placing priority on short papers in consideration of the assessments. The lesson that Japan should take away from Britain’s experience is the need to (1) clarify the ultimate goals sought through “selectivity and concentration,” (2) tailor the evaluation process (means) to the policy objectives (ends), (3) carefully consider the effects and unintended consequences of evaluation, (4) provide disclosure concerning the evaluation process and the allocation of resources based on evaluations, and (5) conduct “evaluations of the evaluation.”

Panel Discussion

The Role and Potential of Universities and University Libraries

Moderator: Shoji Komai

(Nara Institute of Science and Technology)

Panel members: Hiroya Takeuchi (Chiba University) / Hisashi Nakao (Yamaguchi University) / Ko Nomura (Nagoya University) / Kiyonori Nagasaki (International Institute for Digital Humanities) / Masaki Nakamura (Osaka University) / Ikuya Sato (Hitotsubashi University)

In the panel discussion, participants and attendees exchanged a range of views on such issues as the requirements for good evaluation and systems to enable new modes of evaluation. The following is a summary of their discussion.



SATO: It’s important to consider the purpose of the evaluation, and for whom it’s being carried out. We need to think about how to assess the qualitative aspects of research.

TAKEUCHI: I think a key problem is the base used for evaluation. In the STM disciplines, research competition focuses on the number of

citations, and most people recognize that that’s a pretty accurate reflection of research evaluation. But in the humanities and social sciences, the number of citations doesn’t accurately reflect the academic assessment of research quality. When you try to come up with an indicator that most scholars in the humanities and social sciences would accept, you realize there are basic problems with the scholarly communication ecosystem. In Japan’s humanities and social science disciplines, it isn’t even a question of open access yet, since many of the scholarly journals haven’t been digitized. A more developed scholarly information and communication ecosystem would pave the way for more diverse modes of evaluation.

KOMAI: In Japan, there’s a tendency to move ahead with something only when we’re certain that it can be implemented perfectly. But why shouldn’t we start with what we’re capable of doing now? We can also consider new modes of evaluation, such as the Facebook “Like” button or asking people to name papers they like, as in sociometric testing. And we need to think about ways of evaluating broader social impact. We need a platform that accommodates a range of evaluation methods. If anyone has any ideas on that, I’d love to hear them.

FROM THE FLOOR: I think environmental studies can be viewed as a sort of microcosm of scholarship in that they’re multidisciplinary, comprising many different facets. I’m wondering how research in environmental studies is evaluated, taking into account the diverse nature of the constituent disciplines.

NOMURA: In environmental studies, we currently leave that to the judgment of experts in the individual disciplines. But there are efforts underway to conform to international guidelines, as by submitting papers to peer-reviewed journals, and a new peer-reviewed journal was even launched with this objective in mind.

FROM THE FLOOR: It seems to me that one can’t even begin to discuss evaluation methods without access to the data to be evaluated. I think whoever generates the research should provide access to what they’ve done in list form, and then leave the evaluating to the evaluators.

FROM THE FLOOR: Facebook’s “Like” function seems easy enough to implement from a technical standpoint, and it could probably be embedded in institutions’ online repositories. Institutional repositories could also take over the citation tracking function that CiNii used to perform.

FROM THE FLOOR: I think we have to be careful because as soon as evaluators specify their assessment criteria, researchers start tailoring their activities to those criteria. For example, if they adopt the number of papers as a criterion, then researchers will start churning out papers, and if they use books as a criterion, they'll start writing books.

SATO: I'm very concerned that unless we clarify the purpose of evaluation, technology will run

--Attendee feedback--

It was a very stimulating seminar because so many of their points hit home. I seem to have a librarian mode and a researcher mode, and during this seminar I was in "researcher mode." Almost all the presenters were researchers, and it was a very good balance of viewpoints. Their analyses were spot-on, and I was very satisfied with the way they kept sight of both the positive and the negative sides of evaluation. It was especially interesting to hear the panelists argue that "there's such a thing as slow science in the natural sciences too, and standard evaluation criteria have helped science progress"

away with the whole process. In the field of art, university assessments take the form of exhibitions. Assessment is based on peer evaluation.

KOMAI: We're not going to come up with the answers here today, but it's clear we need to keep thinking about approaches to evaluation, so I hope we can continue holding these kinds of discussions.

(Nakao); that "assessment begins to go off track as soon as you establish assessment criteria" (Sato, Adachi); that "there have also been problems in the humanities and social sciences, which haven't set clear evaluation criteria" (Takeuchi). The discussion impressed on me the dilemma between accommodating diversity and keeping things in hand. Judged in terms of the number of times the discussion really "clicked," I think this might have been the most stimulating SPARC Japan seminar yet. I'm really glad I attended.

(person affiliated with university library)

-----Afterword-----

😊 With the recent reorganization of Japan's higher education system raising questions about the need for the humanities, the topic raised universal issues of scholarship, in the humanities and sciences alike. Most scholars recognize that the phenomena they study are multidimensional and need to be approached from more than one angle. Surely the same principle applies to research evaluation. It seems to me that scholars need to take responsibility for promoting this sort of understanding and showing people how to probe beneath the surface of things.

Shoji Komai
(Nara Institute of Science and Technology)

😊 Evaluation of research in the humanities and social sciences is a very important theme but a tricky one, and there were doubts during the planning stages as to whether it would be possible to hold a very meaningful seminar. But I think that the presentations, which represented a range of perspectives, along with the opinions expressed from the floor, have provided us with some

important clues on how to proceed. Developing assessment criteria that will satisfy people in every discipline is a difficult task, but I get the sense that it's important to start with what we are able to do now, tailoring assessment to the purpose, and to keep evaluating our evaluation systems to avoid stultifying rigidity.

Keiko Yokoi
(University Library, the University of Tokyo)

😊 This year there has been a lot of talk in the media about evaluation of research in the humanities and social sciences, and as it has become an issue in my own department, I had a strong personal interest. It's not an issue that lends itself to easy answers, but I think it's important that we continue debating it in various forums and gradually formulate a new vision for and approach to the humanities and social sciences. I hope that this seminar contributes to that process.

Shinji Mine
(Mie University)



■ The 2nd SPARC Japan Seminar 2015

“Towards the new paradigm of science and scholarly communication environment

— e-Science, research data sharing, and research data infrastructures —”

Wednesday, October 21, 2015: National Institute of Informatics
12th floor conference room (Attendees: 100)

During the past several years, research data management and sharing have become critically important issues to academic and research institutions as well as to those in the scholarly communication community. In the past, data that were generated in the research process belonged to the researchers themselves or the research community with which they were affiliated. But the rapid development and commoditization of information and communication technology from the 1990s on—first with the Internet and later with the spread of wireless and mobile technology—led to an exponential increase in the volume and range of data in various scientific fields and at the same time greatly facilitated the processing and sharing of such data. These changes in the data environment sparked predictions of a major paradigm shift in the way we carry out scientific research—the so-called “fourth paradigm,” also referred to as e-science, data-driven science, and data-intensive science. Meanwhile, an increasing number of academic and research institutions were embracing open-access policies. While the initial focus of open access was research papers, the concept has influenced people’s thinking on research data as well. Over the past few years, there has been a growing push for sharing of data in the name of “open data” and “open science.” Today, we are grappling with new challenges posed by the sharing of research data as we move toward a new scientific paradigm. This seminar was organized with the aim of fostering an essential understanding of the issues of research data management and sharing among such stakeholders as researchers, research administrators, engineers, publishers, government institutions, and library professionals who support research, as well as others with an interest in the new scientific paradigm, and to provide an opportunity for discussion about how to create a research support environment that meets scientists’ needs.

A summary of the seminar is given below. See the SPARC Japan website

(<http://www.nii.ac.jp/sparc/en/event/2015/20151021en.html>) for handouts and other details.

Part 1: Keynote Address

Open Data is not Enough

Mark Parsons

(Secretary General, Research Data Alliance)



Part 2: Science and Research Data

Presentations

Design of Research Infrastructure and Utilization of Research Data for Breaking through “Research Barriers”

Asanobu Kitamoto

(National Institute of Informatics)

Inductively Think about Impacts of Open Platforms on Research

Daisuke Ikeda

(Department of Informatics, Kyushu University)

Research data sharing in the field of solar-terrestrial physics

Masahito Nosé

(Graduate School of Science, Kyoto University)

Panel Discussion

How ought the research data sharing to be?

Moderator: Hideaki Takeda

(National Institute of Informatics)

Panel members: Part 1 and Part 2 speakers

(see above)



TAKEDA: Who should be given credit for research data? How should data attribution be handled?

PARSONS: In some situations, data citation can provide an incentive for sharing research. Accountability is another important function. In one RDA project, they're trying to break research down into all its constituent roles for citation purposes. The motivation for data citation has changed.

KITAMOTO: Ideally, I think that the purpose of citation should be acknowledging credit. Right now the focus is just on data citation to facilitate reproducibility, probably because this suits the scientific journals, which are very influential. As long as one can meet the credit acknowledgement requirements by citing papers, people are not going to bother about detailed data citations. But how to assign credit for data is a big issue. I've proposed that each scientific community establish a "shoulders of giants" prize. The point is that a researcher's contribution should be judged by the degree to which he or she has created "giants' shoulders" for others to stand on—not just through research papers but also through data sharing and development of data infrastructure.

IKEDA: In his presentation, Mark mentioned a dynamic-data citation working group. I first heard about dynamic-data citation at the RDA Plenary Meeting last March. This would allow you to cite subsets of a dataset and credit the generator of that particular subset. Some people may not think that's necessary, but from a technical standpoint, it should be feasible.

TAKEDA: Citation issues could take us rather far afield. Let's go back to the simple question, "Who

should be given the credit for research data"?

NOSÉ: My work involves both research and data management. In our field of research, data sharing has become a matter of course, and we haven't given much thought to credit. But I think it would be best to acknowledge the people who collect the data, as well as those who manage it and provide it, so that we could use it as a metric in assessing people's work.

TAKEDA: Given that the scope of data reuse is bound to expand as we go forward, it sounds like we should be moving in the direction of clearly acknowledging credit for research data.

NOSÉ: The reason I've personally become involved with the digital object identifier (DOI) system and so forth is that I'm interested in giving credit to the people who provide the data so it can be used as a metric for assessment. It seems to me that if we create a culture of data citation, it will make itself felt in a more equitable acknowledgment of credit.

TAKEDA: With the current technology, it's possible to display any number of credits. So, it seems to me that attaching full credit is the direction in which data sharing should be heading.

TAKEDA: Who should be involved in supporting data sharing, and how?

NOSÉ: Scientists in the domain have to be involved in the undertaking to some degree. If you don't understand the content, you can't provide good access to it. But it also requires people with broader expertise in the handling of big data [data curators].

PARSONS: I agree with Mr. Nosé. It can't be done without specialized subject knowledge.

KITAMOTO: And I agree that data curators are important. But I like the analogy of physical infrastructure, which requires expertise in architecture, civil engineering, and other fields. I would think construction of data infrastructure involves collaboration among comparable specialists, including experts in information science.

IKEDA: In terms of figuring out how to share research papers, there are now well-established institutional repositories and digital libraries like arXiv.org in various domains, but some of the disciplines that came late to the idea of digital

access are still struggling with it. I don't think it should be the researchers' job to figure out how to share their data. I've suggested that the process can be divided into two stages, with universities and research institutions being required to store the raw data, and specialists taking charge of curation.

ADACHI (floor): In Japan, the issues of preserving and sharing data are all tangled up with the problem of research misconduct. Is that true in the West as well? I'd also like to ask about the problem of protecting personal information with open databases.

PARSONS: I agree there's a need to separate these concerns. But there are complex educational issues and ethical boundaries that need to be considered when it comes to sharing data. Data citation can help with accountability, but it isn't a panacea. I think data sharing should be carried out at the organizational level in a centralized manner.

IKEDA: I think we can let the institutions handle those issues. Of course there are personal data and other kinds of data that can't be made open, but I think it's possible to use the power of information to distinguish between data that can be made open and that which can't be. At the same time, a completely open approach to science isn't really viable as a business model, is it? I think the reason institutional repositories have proliferated to this point is that we've left the decisions to the institutions.

ADACHI (floor): A database needs ongoing maintenance or it becomes obsolete. You can't just leave it to a curator. The successful databases are those that were developed organizationally and are centrally administered. I think Japan should have the infrastructure to support that. We can't ask individual researchers to devote their efforts to data maintenance.

TAKEDA: I think we're agreed that data sharing shouldn't be left to the researchers. I don't imagine there's just one answer. We should be aware that there's such a thing as professional data curation, and we need to actively tap into the resources of computer science. And I imagine we also need to clarify the role of the professional community or discipline and make sure everyone is working as a team.

TAKEDA: What form should data-use licensing take in these cases?

PARSONS: Data that are collected with public money should be viewed as a public good. In such cases, I prefer something like the Creative Commons Zero (CC0), which puts the data as much as possible in the public domain, within certain ethical constraints.

KITAMOTO: I think there's an infinite spectrum of possibilities, from closed to open, but since it's hard to deal with an infinite number of choices, we probably need to specify a finite number of models. As an option for licensing, I think CC0 is at the extreme open end of the spectrum.

IKEDA: My feeling is that access control systems are more important than licensing for open data.

NOSÉ: Where natural science data are concerned, I think it's clear that data collected with the support of public funds should be open. But we still need to acknowledge priority rights.

Part 3: Research data infrastructure of Japan Presentations

Research data infrastructure of Japan

Takafumi Kato

(Japan Science and Technology Agency)

Database for upper atmospheric science ~Activity of the IUGONET project~

Yoshimasa Tanaka

(National Institute of Polar Research)

Sharing Data Sets as Research Resources

Keizo Oyama

(National Institute of Informatics)

Introductory Guide of Open Data for Administrative Staff

Nami Hoshiko

(Kyushu University Library)

Panel Discussion

What is the needs of researchers for the research data environment and how should we deal with?

Moderator: Kei Kurakawa

(National Institute of Informatics)

Panel members: Part 3 speakers (see above)

KURAKAWA: How do we go about developing our research data infrastructure? I'd like to hear your views from the standpoint of your respective domains, looking at the historical development and how user needs are changing.



KATO: Our efforts at DOI registration for research data thus far have focused on identification at a basic level. The metadata are also fairly simple and general, so a given domain may not find it that useful. In terms of our immediate goals, I think we want to develop something that can be used to link different types of data, such as papers and raw data, and data in different fields, while leaving the details of application to the domain-specific databases.

KURAKAWA: The Japan Science and Technology Agency's Japan Link Center [JaLC] could be considered a big infrastructure project, I think. I assume the registration of DOIs was expanded from papers to data in response to users' changing needs. Is that correct?

KATO: There was some talk of big infrastructure, but the main idea was to create a platform to ensure that information originating in Japan wouldn't be lost or overlooked. Meanwhile, with the emphasis shifting from papers to data, we've become aware that people need data identifiers so that they could track citations and use that data for evaluations. So, we're also working on the assignment of DOIs to research data to help facilitate quantitative assessment.

TANAKA: In the past, it was possible for scientists to write research papers just by analyzing data they collected individually, but today it's assumed that you get better results using a wide range of data to verify a phenomenon, and that's the prevailing style of research. That's why there's a growing demand for IUGONET.

OYAMA: In terms of the development of databases, there's been a huge change in scale and precision. In the past, the technical and cost constraints made it necessary to create well-organized data carefully. Nowadays, particularly with the rise of new statistical methods, the mainstream approach involves analyzing huge volumes of raw data from different angles in hopes of coming up with something. For another thing, research in information science used to have a narrow, technical focus, but nowadays there's more emphasis on research spanning different kinds of

media or exploring the interaction between information and society. Human beings and society have become subjects of study for information scientists.

HOSHIKO: At the library, we've received queries about creating a public database from the University Research Administrator and the administration division, but at this time we don't have a good handle on the needs of researchers themselves.

KURAKAWA: What are some of the practical hurdles and considerations we should be aware of with regard to data management and sharing?

KATO: One problem is that validation of metadata hasn't made sufficient progress because there are so few use cases. Also, we want to make sure communication flows smoothly along all the various routes that have been established.

TANAKA: With regard to IUGONET, we worry about licensing and attribution. IUGONET itself isn't responsible for setting data sharing policies; each participating institution establishes its own data policies. As things stand, we're pretty much operating on the honor system, and there's no quantitative monitoring, so we feel some pressure to address that issue.

OYAMA: We make a big point of clearly explaining the conditions for use when people submit data.

HOSHIKO: Since we instituted a discovery service, there have been more requests for digital images of rare books and the like, and this has made us more conscious of the importance of good data management.

--Attendee feedback--

(people affiliated with university libraries)

- Hearing what kinds of data are actually being handled, I could tell that the level of involvement varies a lot by discipline.
- I didn't understand everything that was said, but I was able to get a better sense of the state of the field and current trends. It was good to get a perspective on data sharing from people in the scientific community.

(university educator)

- It reminded me that there are important issues to be addressed, such as acknowledgment of data compilers and funding.

(university researcher)

- I was able to acquire some information in preparation for next year's RDA Plenary.

(other library staff)

- Since the context varies by field, it took a lot of effort to follow the direction of the discussion.
- I had wanted to hear about open data and open science from the researchers' standpoint, so it was very helpful.

(other university/research staff)

- I was able to get a good picture of the state of open data and some actual examples.

(others)

- I learned a lot about the RDA. I appreciated the topics and the way it was organized.

-----Afterword-----

😊 For the past three years or so, the institutional repository movement has more or less plateaued, and just as I was thinking that research data might be the next big thing, I got a request from the SPARC Japan planning committee to help with this seminar. As a researcher specializing in digital libraries with a focus on author-name aggregation, I still feel out of my depth when it comes to the subject of scientific data curation. Scientific data take the form of spreadsheets full of things like observed variables and latent variables, and if one doesn't understand the model, the data are impossible to understand. When I dipped into some textbooks in the field in an effort gain a better understanding of those models, I had to go back and review my math, and I felt I was sinking even deeper. Unlike metadata for documents like books and articles, metadata for scientific data describe the specific models used in each field. The reason library personnel are easily able to handle metadata for document repositories is that the data described are in the form of books and other text-based documents, which are a librarian's field of expertise. I wonder if the time will come when we can package scientific data in such a way that professionals other than researchers in the field can manipulate it.

Kei Kurakawa
(National Institute of Informatics)

😊 Planning and taking part in this seminar gave me an opportunity to think about some big issues of research data management that I have yet to incorporate into my day-to-day duties as a librarian. The keynote presentation by Mark Parsons offered a fascinating picture of the RDA's activities and future directions. The researchers' presentations provided easy-to-understand explanations of a wide range of research data along with specific examples of data management and sharing, to help bring the subject closer to home. I would like to thank everyone whose participation and cooperation helped make this seminar possible.

Nami Hoshiko
(Kyushu University Library)

😊 It was very stimulating planning a seminar in collaboration with scientific researchers. My impression was that scientists have fairly low expectations of library professionals when it comes to the subject of open data and open science. But I think that we library professionals should participate actively in such discussions and work to put our libraries in the best possible position to support scientific research. I think this seminar provided an impetus for that.

Shigetoshi Kajiwarra
(Hokkaido University Library)





■ The 3rd SPARC Japan Seminar 2015

“Challenges and Possibilities of Emerging Research Information Platforms”

Tuesday, January 19, 2016: National Institute of Informatics
12th floor conference room (Attendees: 87)

The purpose of the latest SPARC Japan Seminar was to provide an overview and grasp of recent developments and emerging trends in scholarly communication platforms, illustrated by real-world examples of how researchers are putting these tools to use, and to discuss the possibilities and challenges these platforms present for research and how university libraries can engage with the new technology.

See the SPARC Japan website for presentation abstracts, handouts, and other details (<http://www.nii.ac.jp/sparc/en/event/2015/20160119en.html>).

Presentations

Outline

Shinji Mine

(Faculty of Humanities, Law and Economics,
Mie University)

Until recently, scholarly publishers and academic societies have performed the role of preserving and communicating research results via service portals, access platforms, and terminal platforms. But in recent years new platforms have emerged one after another: social networking services (SNS) for scientists, Google Scholar, and ReadCube are just a few examples. A survey by the journal Nature found that many researchers use a variety of these platforms. But others take a much more conservative, skeptical stance, questioning their trustworthiness and their relevance to the heart of research. How, then, should libraries engage with these platforms?

The Slow Revolution in Scholarly Communication and How Libraries Can Adapt Their Perspective

Jeroen Bosman

(Utrecht University Library)



I was born in 1964, the same year as the Shinkansen, and I have always been very interested in Japan as a leader in advanced technology. I believe that new technology can contribute to scholarly communication as well. In the course of our survey (101 Innovations in Scholarly Communication), the number of available research tools soared from 20 to over 100 in a period of a few months. Researchers make use of such tools for searching the literature, analyzing data, writing, publishing, outreach, and evaluation. As of now, there are more than 600 research tools in existence. Although the first scholarly publishing and communication platforms were developed by publishers, many of the newer tools are the creation of researchers, yet they are open platforms that anyone can use. As a way to think about these tools and their utility, we adopted a simple model we call G-E-O (good, efficient, open). The key points to consider are whether they enhance openness (O), efficiency (E), and fairness or reproducibility (G). Of course, it will take time, but objective assessment serves to combat fraud and misconduct. The important thing is that conferences like this event are taking place all around the world, and the discussion is moving forward.

Another way to look at these tools is from the standpoint of workflow. The basic phases of the research cycle are preparation, discovery, analysis, writing, publication, outreach, and assessment, though in practice the workflow is more complex. The advent of open science is altering the

workflow. Nowadays researchers can get feedback from the public while their project is still in its planning stages, and they can publish their research one section at a time. This can enhance research credibility. The tools can also be linked in different ways to create different workflow models (traditional, modern, innovative, experimental).

The preliminary results of our survey have shed light on how researchers are using these tools. As of the end of 2015, we had received 8,028 responses. On the question “Do you support open access?” the results varied by country, and the highest rate of support came from Venezuela, though more analysis is needed to explain why. Once all the data has been gathered, we plan to enlist a lot of people to analyze it more closely part by part. For outreach, early-career researchers were more likely to use Twitter than senior researchers. In Japan, EndNote was the most widely used reference management tool, followed by Mendeley and “others.”

I have listed ways in which libraries can be of use at each stage of research, and I’d like to discuss the role of libraries going forward. In addition to building on our traditional strengths, it’s important for libraries to tap human resources for development of new platforms. Our platform Dashboard can help institutions make use of the data from the 101 Innovations project. Also, I am calling on libraries to play an active role in the distribution of our survey. We have received only 250 completed surveys from Japan so far, and the response from some other Asian countries has been minimal. The survey can be conducted at the individual level, so please contact us if you are interested in cooperating. What we have done so far is not the goal line but a starting point in terms of getting a handle on the current situation and future directions.

A Brief Review of ‘Social Networks for Scientists’

Keita Bando

(Coordinator for the Online Platform for Scientific Communication)

Today I would like you to join with me in thinking about social networking for researchers from the library perspective. SNS for scientists lagged behind business and personal networks by several years, but today sites like ResearchGate, Academia, and Mendeley—all three launched in

2008—are quite popular among researchers. ResearchGate is the most widely used among scientists, according to an August 2014 survey. ResearchGate is also used by many scholars in the social sciences and humanities, but Academia is popular as well. In the 101 Innovations survey (as of June 2015), the majority of respondents indicated that they use institutional repositories to archive and share research, but it seems that librarians made up a large percentage of the respondents. ResearchGate seems to have about as many users as institutional repositories.

I’d like to talk briefly about the use of social networks for archiving, collaboration (annotation), and rating or scoring of researchers and institutions. As repositories, social networks have been criticized from the standpoint of reliable long-term archiving, and some are of the belief that we should stick with institutional repositories. In terms of annotation, the “open annotation” movement has been picking up momentum, and many publishers have signed on. In this context, it will be interesting to see what develops with academic SNS that are promoting their own annotation functions. There is a lot of opposition to these sites’ use of metrics to rate scientific impact and reputation. Unless users understand the pitfalls of these rating systems, they could find them a double-edged sword. From the standpoint of altmetrics (alternative metrics), it can be argued that more data is needed to create valid metrics. Libraries need to start thinking about ways to link institutional repositories and research information systems with SNS for scientists.

SNS for Researchers: ResearchGate

Fujio Toriumi

(Graduate School of Engineering, The University of Tokyo)

I’d like to talk about ResearchGate from my own perspective as a user and as a researcher studying social media. Here are some of its convenient features. (1) The “Stats” feature allows one to keep track of evaluations of one’s work on a daily basis. (2) The Upload function is a convenient way of sharing papers. (3) With “Request Full Text,” one can ask for the full text of articles that are not open access. (4) One can share experimental data as well as papers. (5) The Jobs section has information on job openings worldwide. (6) The Questions function allows one to ask, answer, and view

questions about research. (7) One can automatically create a CV from one's profile, which is quite helpful.

What makes a social media successful or unsuccessful? What determines whether people use it? The value comes from the fact that users share their information with everyone. A network's success or failure can be expressed in terms of the public goods game, i.e., *cooperation* versus *defection*. In some cases, the rational outcome is for everyone to defect. Networks try to attract users by getting as many people as possible to cooperate. What seems to work best is rewarding those who cooperate and also rewarding those who reward the cooperators. Seen in this light, ResearchGate appears to have developed a superior system for encouraging cooperation.

Are Blogs Useful for Research? How?

Jun Tarui

(Graduate School of Informatics and Engineering, University of Electro-Communications)

An interesting example of the use of scholarly blogs in the field of mathematics occurred in 2010. Vinay Deolalikar's claimed proof that $P \neq NP$ became the focus of an intense online discussion lasting about five days after it was introduced by Richard J. Lipton on a computer science blog. The post elicited a lively debate, with users posting about 200 comments a day, and of these about 100 comments were from serious mathematicians. In the end, the discussion concluded that the proof contained a crucial flaw. A positive comment early on by Turing Award winner Stephen Cook had a big impact. Terence Tao and Timothy Gowers participated in the online discussion, and Tao's Wiki page helped summarize the debate. It was gratifying to see so many lay people interested in such a discussion. It helps tremendously when the mainstream media join in with commentary. European and American science journalists are very quick to pick up on science news. The idea of a "multidisciplinary proof" and the participation of star researchers created a major brouhaha that attracted media attention.

Science blogs are useful for keeping up with the latest news, grasping ideas quickly and efficiently with the help of presentation videos, and connecting with others in the field, which is gratifying. The downside is that they are distracting. I think they could

also be useful for publishing alternative proofs.

Panel Discussion

Moderator and panelist: Kazuhiro Hayashi
(National Institute of Science and Technology Policy)

Panel members: Jeroen Bosman (Utrecht University Library) / Keita Bando / Fujio Toriumi (The University of Tokyo) / Jun Tarui (University of Electro-Communications) / Shinji Mine (Mie University)



HAYASHI: SPARC Japan has already held a number of seminars dealing with social media and new scholarly communication services with such guests as Victor Henning, who developed Mendeley. In an earlier essay, I outlined three stages in the development of scholarly publishing and communication services. Stage 1 was the digitization of functions previously performed by print media. At stage 2, they added value incrementally. But stage 3 introduced discontinuous or disruptive innovation to carry out the original purpose of the service. An example of discontinuous or disruptive change is the experiment of conducting open post-publication peer review. As one involved in the governance of an academic society, I saw SNS as a threat because they had the potential to suddenly replace societies as a vehicle for scholarly communication. Mr. Bosman's presentation showed me that, for better or for worse, change in that area is proceeding less rapidly than I anticipated. It seems that today's researchers fall into one of two categories: those that embrace the new tools and services enthusiastically, and those that use them very little. One senses a kind of technological divide in the area of scholarly communication. Mathematicians have been using blogs and such for quite a while, so I wonder if they feel a need for newer tools? How is it in the Netherlands?

BOSMAN: In some disciplines, there is more use of online repository functions. In physics and economics, there's a preference for sharing via print media. But this could

change as new tools emerge.

HAYASHI: Are there any signs of the next generation of research information platforms?

TARUI: When it comes to social networking, there may be added value, but the mechanism isn't transparent. There's a sense that simpler is better.

TORIUMI: People of all generations are basically lazy. They only use platforms because they have to. SNS provide a little more incentive for engagement.

HAYASHI: Do you think public-goods theory could be applied to improve institutional repositories?

MINE: Institutional repositories don't have the feedback mechanism, so there's no motivation.

HAYASHI: I suppose you could say this underscores the weak point of institutional repositories. Are there any questions from the floor?

FROM THE FLOOR 1: Is it all right to post a paper on an SNS? I ask people to check with the publisher first regarding copyright policy. Perhaps one merit of institutional repositories is copyright management?

HAYASHI: As long as there is mutual compliance, it should be a win-win situation.

FROM THE FLOOR 2: You can't post a paper on an SNS unless the paper is open access. Along with copyright issues, it raises problems in terms of tracking usage. Groups of publishers have drawn up copyright guidelines. In the future, it would be great if SNS groups could enter into agreements with the publishers.

BANDO: It seems to me that users would like to make free use of SNS. On the other hand, it takes time and effort to deposit outputs in repositories. Don't repositories themselves create a barrier? Can't it be part of the library's job to address copyright issues?

BOSMAN: As users come to take SNS for granted, the incentives will cease to serve as motivation. I wonder if we don't need to

think about a metric for evaluating researchers?

HAYASHI: So, how should we move forward under the circumstances?

FROM THE FLOOR 3: Scientific information systems are basically geared to researchers. I think library services should be geared to all kinds of people. The big challenge is finding ways for SNS and repositories to work together.

HAYASHI: What about the vendors in the audience? Do you have your own take on the topics we've discussed today?

FROM THE FLOOR 4: I belong to a company that makes a variety of research tools. For us, it's become harder to anticipate the needs of researchers.

HAYASHI: Mr. Bosman, would you like to comment as someone who has looked at 600 tools?

BOSMAN: Looking at what already exists is important in anticipating future needs, but it's also important to imagine the future from a visionary perspective.

HAYASHI: The story you hear behind a lot of these tools is that individual scholars created them to meet their own needs.

FROM THE FLOOR 5: I've been seeing revolutionary changes in the world of software development. As soon as the developer saves a program, it's checked for bugs and then released. Workflow is automated. That could be applied to research in some situations. Did the 101 Innovations program identify tools to support communication within the research process?

BOSMAN: There is a joint authoring tool, but it's only recently been launched. There are tools that provide literature alerts as soon as you write down an idea and others that provide corrections in style.

HAYASHI: The pace of change as we've seen it today is just so rapid. I'd like to ask the audience: Should we try to keep up with these trends, or should we wait until we understand the situation better?

FROM THE FLOOR 6: It seems to me that people who are lacking the must-haves are jumping at things that are just nice to have. I think the discussion should be grounded in an awareness of what's really essential to researchers.

HAYASHI: Finally, I'd like to ask each of our panelists to say a word or two summing up your thoughts on our discussion today.

BOSMAN: The focus should be on what you're trying to do, not the tools themselves. It's important to talk about that.

BANDO: I'm glad I got to hear about how researchers are actually using these resources. I want to stay current regarding the digital tools people are using and what they're still lacking in terms of practical research needs.

TORIUMI: Scientists do this sort of thing because they want to conduct research, not because they like to use tools. The reason they use tools is that they have to, or else that it makes things easier. It would be nice if the tools accommodated themselves more to the researcher.

--Attendee feedback--

(people affiliated with university libraries)

- Next time a faculty member asks me if I know about such-and-such a tool, I think I'll be able to discuss it in general terms. It was something new to hear scientists talk about being gratified by the response from others.

- I think it was very meaningful to hear about these platforms from the perspective of scholars, including the speaker who described how he uses ResearchGate.

- I was able to learn (hear) about the situation both from a panoramic perspective and from the standpoint of the individual researcher, so I feel that I've begun to grasp (albeit dimly) the main issues.

(corporate and other attendees)

- The discussions we've been having at the office have been like the proverbial frog in the well. Things have been changing so much faster than we supposed. I'm going to think about ways we can leverage our drive as a business to improve our own services as a company.

- It was extremely helpful to listen to first-hand accounts by scientists who are actually using these tools in their research.

- The librarians that I usually mingle with only talk about paid services like Mendeley, so I didn't

TARUI: Researchers want to improve their efficiency. We'll jump at anything that makes our work easier. I don't think anything has come out over the past five years that makes our work dramatically easier. One of these days, something will appear where we least expect it. And when it does, we'll go with it! For a scientist, there's nothing to be gained from submitting your paper to an institutional repository! In the United States, they seem to have fizzled out. You should ask your researchers if they really find them helpful.

MINE: The discussion brought home to me the importance of staying power for services of this nature. So maybe it's important to continue improving existing services at the same time that we're creating new ones.

**Summary by Shoji Komai
(Nara Institute of Science and Technology)**

realize that ResearchGate and Academia.edu have a lot more registered users than Mendeley. I would be interested to know how many active users there are in Japan.

(other library staff)

- I didn't have any idea of how to make use of social media, but now I realize we need to start thinking about it, because social media is becoming an integral aspect of scholarly communication.

- It gave me a lot of food for thought on what makes researchers' work easier and what we should offer as library staff. What are must-haves and what are nice-to-haves? This is what we need to think about when providing services.

- I learned how scientists make use of SNS in their research, and it gave me something to think about in terms of how libraries should engage with social media going forward.

-----Afterword-----

😊 The seminar reaffirmed for me the role of scholarly communication platforms in research activity and the importance of responding to the needs of researchers. Although the focus of the seminar was social media services, much of what was said about their place in the research process and the needs of researchers applies equally to the platforms built by university libraries (institutional repositories, etc.), so it provided quite a few useful hints.

Shinji Mine
(Mie University)

😊 This turned out to be one of SPARC Japan's more unconventional seminars. It was especially valuable to hear the honest opinions of the two young scientists on the program. From the products we've seen to date, it is clear that tools or services that are fun to use may attract some researchers, but they only acquire staying power when they become essential to the research process. It occurred to me that all stakeholders should be thinking about how we can bring forth the vital

research products and services of tomorrow from the 600-plus tools now in existence.

Kazuhiro Hayashi
(National Institute of Science and Technology Policy)

😊 As a university librarian, I believe it is important for me to understand how researchers access and utilize information in order to provide better support to our faculty. I feel this seminar was a very valuable learning opportunity, since it made me aware of the large number of research tools that have already emerged, how they are being used, and what research needs still remain unmet. At the same time, since it seems doubtful that all of these tools are necessary, the seminar impressed on me the importance of identifying which tools are fundamentally needed by researchers in any given discipline or area, given the nature of the field and the type of research involved.

Keiko Yokoi
(University Library, the University of Tokyo)



■ The 4th SPARC Japan Seminar 2015

“The Function of University Libraries in the Context of Research Promotion”

Wednesday, March 9, 2016: Bellesalle Jimbocho Annex

Hall A (Attendees: 161)

Concept and Purpose

Kei Kurakawa (National Institute of Informatics)

This seminar was designed on the basis of the actual work of a single university librarian. Accordingly, the topics were framed from the standpoint of providing guidelines for dealing with questions that come up in the course of an individual's experience. The aim, however, was not to share the sort of know-how commonly found in practice-oriented venues so much as to share concepts that encourage concrete action. Rather than transmitting individual work knowledge, it aimed to generalize that knowledge in hopes of turning it into a force uniting the community. The program prospectus, drawn up with expectations of large attendance by university librarians, made the following appeal: “As university libraries, we should not be content to mull over and parse the meaning of ‘open access’ and ‘open science’ as exotic foreign concepts. Through our examination in this seminar, we want to tackle these concepts in the context of the advancement of research in Japan and, in the process, forge concrete strategies for the future of research support.”

Since 2003, SPARC Japan has consistently advocated open access to scientific knowledge. Today, the more radical concept of “open science” is beginning to enter mainstream thinking in the community. What course should our university libraries chart henceforth in the context of these trends? A framework for grappling with this question was built into the program. Figure 1 illustrates this framework—a basic narrative beginning with the seminal concept of “open access,” proceeding to the challenges and issues arising from that concept, and ultimately redefining the role of the university library.

To perform the leading roles in this scenario, one would naturally need top-caliber professionals who have demonstrated and acted on a sound understanding of the concepts. Fortunately, the list of speakers reads like a Who's Who of leading figures in the field. The role of each of our speakers relative to the seminar's scenario is illustrated in Figure 2. Given the all-star cast, I am inclined to look on the outcome as the “miracle of Jimbocho” (the district in Tokyo where the seminar was held). A “cast of characters,” including each speaker's topic, is provided below for reference.

1. Koichi Ojio (University of Tokyo Library System): Promotion of Open Access and Research Support—New Challenges for University Libraries
2. Takashi Hikihara (Director-General, Kyoto University Library Network): What the Formulation of Open Access Policies Means for Research Support
3. Hiroshi Manago (Cabinet Office, Government of Japan): Promoting Open Science
4. Setsuo Arikawa (Former President, Kyushu University): The Role of University Libraries in the Advancement of Research in Japan

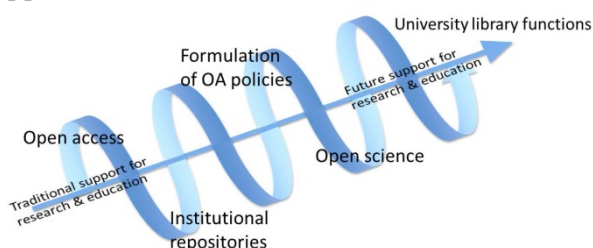


Figure 1. Purpose and Structure of the Seminar



Figure 2. Roles of Seminar Participants

A summary of the seminar is given below. See the SPARC Japan website (<http://www.nii.ac.jp/sparc/event/2015/20160309.html>) for handouts and other details.

Presentations

Promotion of Open Access and Research Support—New Challenges for University Libraries

Koichi Ojira

(University of Tokyo Library System)

Until now, the research-support functions of university libraries have focused on researchers as readers. Henceforth they need to shift that focus to enhance support for researchers as writers and for the entire scientific process, becoming part of the workflow itself.



What the Formulation of Open Access Policies Means for Research Support

Takashi Hikihara

(Kyoto University)



I am aware that the materials housed in university libraries are gradually changing from resources into liabilities. In the light of this trend, we need

to understand that, for researchers, open access can be an important means of maintaining a scientific community that values basic research—particularly in the face of various external pressures—one where researchers respect and assimilate the research priorities of others. Open access is needed to nurture the researchers of tomorrow. In their role of presenting and transmitting the works that have been published in their professional fields, university faculty members have a duty to generously nurture the next generation of scientists. Pursuing open access policies means increasing the number of people who understand the meaning and importance of open access. Today open data and open science are all the rage, but there is much to be done before we move to that phase.

Promoting Open Science

Hiroshi Manago

(Cabinet Office)

Open science is not simply an exotic, imported concept. It is the subject of active, ongoing deliberations and efforts to build consensus among the individuals and organizations concerned. Open

science is one of the items on the agenda of the G7 Science and Technology Ministers' Meeting to be held in Tsukuba, Ibaraki Prefecture, this year. I wholeheartedly support the role of our university libraries in promoting open science.

At present, however, there is much confusion on our university campuses when it comes to promoting open access and open science. The first step toward resolving this confusion is to clarify the functions of the university library. We also need to develop better liaison with the university's research departments. The university library is the campus's only base for the collection and distribution of research and educational information. The university's top administrators must clearly establish its position as such.



The Role of University Libraries in the Advancement of Research in Japan

Setsuo Arikawa

(Kyushu University)

The university library has actually evolved on a number of fronts. We can gain an objective grasp of this evolution by looking at the relevant laws, standards, reports, and recommendations. In terms of laws and standards, the National School Establishment Act, enacted in 1949 and abrogated in 2004, called for all national universities to have libraries. The 1956 Standards for the Establishment of Universities included detailed requirements for library facilities, but those were reduced to general guidelines in 1991. The requirements set forth in the University Library Standards adopted in 1952 by the Japan University Accreditation Association continue to exert considerable influence over university libraries. Moving on to official reports and recommendations, in March 2006, the Science Information Infrastructure Working Group under the Ministry of Education, Culture, Sports, Science and Technology released the results of deliberations on three basic topics pertaining to scientific information infrastructure: the role of computers and computer networks, the role of university libraries, and the dissemination of scientific information from Japan. Among the subtopics were the



relationship between libraries and electronic journals and the impact on the libraries' financial base; the function of institutional repositories in the context of the open access movement; and the role of library staff with subject knowledge and expertise. In 2010, the working group took up the function and role of university libraries and the development and hiring of qualified university library staff. It is noteworthy that among the keywords that emerged from these deliberations were "direct involvement" in academic support and educational activities and "human resource development" for staffing university libraries. More recently, in a March 2015 report, an expert panel under the Cabinet Office seemed to point the way to new roles and functions for libraries and library personnel in an age of open access and open data.

People are looking to university libraries to shift their emphasis from traditional research support to more direct contributions. This entails the enhancement of research-library functions, the editing and publishing of research results via institutional repositories, appointment of liaison staff and subject librarians, coordination with the university's strategic research planning units, and a more active collaborative role with the University Research Administrator (URA). The future role of liaisons and subject librarians in particular is something that current library personnel should consider seriously in the light of emerging attitudes and expectations attending the advent of open access and open science. In terms of new approaches to research, perhaps librarians could lay the historical and comparative groundwork, while scientists take it from there and focus on meeting society's expectations by devising solutions to current problems.

Kyushu University has gone a step further, embracing a concept of the university library as a partner in collaborative research and implementing organizational reforms to support such functions. For example, the library now has established an Innovation Center for Educational Resource and has embarked on international exchange with libraries overseas. It has also established a Manuscript Library and a Research and Development Division. Especially appealing from a university librarian's point of view is the new Department of Library Science within the Graduate School of Integrated Frontier Sciences, where library staff can enroll as students, teach as faculty members, or both.

In this way, the functions of the university library continue to evolve and deepen, and we need to make organizational changes to accommodate this evolution. A new library is currently under construction.

Panel Discussion

How Can University Libraries Contribute to Building Japan's Research Capacity?

Moderator: Midori Ichiko (Hiyoshi Media Center, Keio University)

Panel members: Koichi Ojiro (University of Tokyo Library System) / Takashi HikiHara (Kyoto University) / Hiroshi Manago (Cabinet Office) / Setsuo Arikawa (Kyushu University)



The library's role and functions

HIKIHARA: Looking at the university library today, people seem to recognize that there are talented individuals, but they don't see what will be going on their job in a future.

OJIRO: The skills and experience of library personnel are not always obvious to outsiders. Researchers tend to take us for granted. We need to work harder for recognition. I think we need to be more aggressive about interacting with the world beyond the confines of the library.

MANAGO: Based on my experience as department head, it seems to me that while one recognizes the abilities of individual librarians, library personnel by disposition often find it hard to step over those boundaries. We need systems that facilitate outside interaction. Also, we should be holding discussions about the function of the library at the university level, not just within the library.

Open science and the library

ARIKAWA: From researchers' standpoint, if data is made open, it will be evaluated. That's an opportunity. I think libraries—subject librarians, for example—could play a part in that process. Open data can create new work for librarians while ushering in new modes of scientific research.

HIKIHARA: Some fields have made a lot more progress toward open science than others. When it comes to the expression of data, there are different dialects, and the inconsistency can create problems. The

trend toward data linkage will probably begin with the fields where it most needs to be carried out. There are still some fields that do not want open data. But with data sharing comes the need for data quality assurance.

OJIRO: When I asked about the strengths of library personnel from the URA's perspective, they stressed the collection, storage, and organization of information. It's easy to see how we can apply those skills to books and research papers, but the nature of research data differs by field, so we need to think carefully about how to handle it.

ARIKAWA: Library personnel can't just rely on existing skills; they need to develop. There are any numbers of possible ways to approach this task, so I don't think they should feel too intimidated.

Data and infrastructure development and researchers' responsibilities

HIKIHARA: A typical approach to research until now has been to share benchmark models and then propose new algorithms. From now on it will probably move in the direction of sharing data and then proposing algorithms, skipping over the model. New techniques will doubtless emerge from open access to data.

MANAGO: Where research data are concerned, we might want to consider modes of coexistence with the publishing industry. This is a worldwide trend. We need to talk more about ways of protecting researchers. And we need to approach it in terms of internal mechanisms, since top-down regulation isn't a realistic option.

ARIKAWA: People often bring up open data in connection with research fraud, but most researchers naturally favor open data as a way to protect themselves from suspicion by providing evidence for their findings. In case of building research environment, since it is different activity from writing a research paper, if someone has a good idea about research environment, we had better copy and imitate it for ourselves.

HIKIHARA: Science is built on theory, quantitative calculations, and experimentation, and you need to make at least two of those conform in order to come up with a thesis. Data alone can't guarantee scientific validity. That's why people conduct multiple experiments and accumulate many examples of phenomena in a kind of carpet-bombing approach. That generates a lot of data, which in turn can lead to the

accidental discovery of new phenomena, with theory bringing up the rear. A lot of people are now advocating this approach.

From the floor

FROM THE FLOOR 1: In our modern age, scientific research is a competitive enterprise, with a focus on who gets credit for a given discovery, but I think we need to find new meaning in the idea of making data open to all and opening the door to discoveries that occur by a process comparable to divine inspiration, as in ancient times. From the standpoint of advancing research, it seems to me that libraries can help by creating an environment conducive to open science, which would at least have an impact on the next generation of researchers.

MANAGO: It's definitely important that our work carry over to the younger generation and the next generation. I would hope researchers would let that thinking guide their behavior as well.

HIKIHARA: What and how people learn will naturally change from generation to generation and over time, but there are still basics that everyone needs to study. Our current environment doesn't do enough to encourage and support that sort of learning. In an activity like research, where people are assimilating lots of new information, one needs to tune out society's constant demands for greater efficiency. It's important to realize that there are various steps along the way.

FROM THE FLOOR 2: Can you say a word about digital data and standardization?

HIKIHARA: Japanese industry has generally tried to set standards by controlling the market, but Western countries tend to lay the ground rules first. In an area in which Japan has no market presence, it can't have any say in standards development if it turns up late in the process. We need to attend these meetings from the very start. We're thinking about sending faculty members to participate.

Summation

The choice of the seminar theme —“The Function of University Libraries in the Context of Research Promotion”— served an important purpose by reminding us of the essential role of the university library, which we have a tendency to lose sight of. It seems to me that the conference provided a valuable opportunity to talk about the role

libraries should play in connection with open science and research data, two of the

hottest topics among professionals in our field.

--Attendee feedback--

(people affiliated with university libraries)

- It's good to know that Mr. Manago, who formerly worked at a national university library, is now pursuing open science in his Cabinet Office post, and I found his discussion very interesting. I look forward to seeing how the G7 deals with the topic and how Japan makes use of its position as chair.

- I got to hear a fairly involved discussion of open science from two different standpoints, that of the scientists who do research and that of those responsible for policy, and in the process of pondering where they differed and where they converged, I think I began to get an understanding of open science and what it is libraries need to do.

- As an event devoted to this topic, it was useful in that it gave me an opportunity to hear the issues

discussed at the level of management.

- I had been feeling a lack of clear direction regarding the function of the university library today. The speakers suggested some directions and helped clarify the issues. I plan to continue thinking about the function of the library within the university when I get back to work.

(person affiliated with an academic society and scholarly journal)

- Although it didn't pertain directly to my work, I was able to hear some different perspectives on open access and open science that will be useful to consider when deliberating policy in the future.

(people affiliated with business/others)

- The blunt language some of the speakers used suggested that they were responding with honesty and passion, and I appreciated that.

-----Afterword-----

😊 At meetings and symposiums of librarians, one rarely has a chance to hear researchers air their strong feelings on these subjects. My special thanks to Dr. Hikihara and Dr. Arikawa for their contributions. If open science can help solve humanity's most pressing problems, as Michael Nielsen suggests, then researchers will naturally play the starring role, but this seminar made me realize how much I want to be involved in some way in my capacity as a librarian, if only from the shadows. But it will be quite a challenge getting the scientific community to embrace a whole new set of values!

Midori Ichiko
(Hiyoshi Media Center, Keio University)

😊 I want to convey my heartfelt appreciation to all those who turned out for this seminar in such impressive numbers. While adhering to the theme of open science and the promotion of research, the speakers made many essential observations with relevance far beyond their individual topics. It was a valuable opportunity to think more deeply about ways I can contribute to society as a librarian and as a human being. I want to thank everyone involved for their helpful suggestions and advice at each step along the way, from the planning stages to the event itself.

Nami Hoshiko
(Kyushu University Library)

😊 Helping to plan the final SPARC seminar of this fiscal year was a rewarding and educational experience. The seminar itself was highly stimulating, and I would imagine it was a meaningful event for university librarians standing on the threshold of the era of open science. I hope I can continue contributing something to the cause of scholarly communication, including open science, by sharing information and collaborating with colleagues.

Shigetoshi Kajiware
(Hokkaido University Library)

😊 I think this particular seminar came about as a result of some unique circumstances. Watching various developments surrounding scholarly information infrastructure and university libraries over these past 10 years at NII, I feel I've learned to sense how the wind will blow from various sectors. I decided to try analyzing the direction of the winds that are now blowing by focusing on a single university librarian, Ms. Hoshiko. Before I knew it, my analysis was being improved on from various quarters, and I was able to watch as dispersed energy converged at a single point. Perhaps we have the special magic of Jimbocho to thank for that.

Kei Kurakawa
(National Institute of Informatics)

SPARC Japan (International Scholarly Communication Initiative)
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