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SPARC Japan
SPARC : Scholarly Publishing and Academic Resources Coalition

SPARC Japan

(International Scholarly Communication Initiative)

Annual Report
FY2014

National Institute of Informatics (NII)

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Foreword

Fiscal 2014 marked the second 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.

The term “open science” began to be widely used during fiscal 2014, to the extent that the term is now frequently found in the reports of European and US government agencies. Several data journals were also launched in quick succession by overseas publishers during this period. Similar developments are observed in Japan as well. In March 2015, the report of the Expert Panel on Open Science Based on Global Perspectives established under the aegis of the Cabinet Office was published as a step toward inclusion of open science in Japan’s next Science and Technology Basic Plan due to start in fiscal 2016.

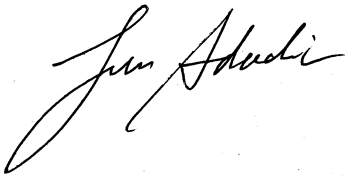
A basic policy of phase 4 of this Initiative has been to prioritize activities promoting open access. Consequently, themes of the SPARC Japan Seminar organized as an advocacy activity have reflected the question of how we can approach open access and open data against the backdrop of ongoing developments in the academic world and the evolving demands of society. I take this opportunity to once again thank the members of the relevant working group for their efforts.

Another principal pillar of this Initiative is the promotion of international cooperation. In this area, we continue to collaborate with university libraries and other institutions, and to support and participate in the governance of arXiv.org and the Sponsoring Consortium

for Open Access Publishing in Particle Physics (SCOAP^3). We have also steadily extended the scope of our open-access advocacy activities including hosting an ORCID Outreach Meeting in Japan. We are committed to continuing these activities in the years ahead.

The activities of SPARC Japan are designed to support the various activities of the open access community. As we continue to work toward this goal, we look to the continued support of organizations and individuals pursuing new forms of scholarly communication.

April 1, 2015



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 SCOAP[3], 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 2014

Based on the Project plans indicated in 1.1, the following were implemented in fiscal 2014.

1.2.1 SPARC Japan Seminar

SPARC Japan seminars were held four times during the fiscal year as advocacy activities. Persons were assigned to plan and implement each seminar and put out newsletters after the seminar, with web editions, so as to inform the public in timely manner.

No. 22 (September 2014): *How Do We Face APCs? ― Perspective of APCs Through Trends and Surveys In and Outside of Japan ―*
No. 23 (October 2014): *Institutional Open Access Policy: Toward the Development of Japanese Models*
No. 24 (November 2014): *Science for 'Generation Open'*
No. 25 (March 2015): *What Should We Do to Expand Green Content?*

1.2.2 Surveys of overseas trends

We participated in the following international conferences and gathered information.

(1) One university librarian attended the Confederation of Open Access Repositories (COAR) Annual Meeting 2014 (2014/5/21–23, Athens, Greece).
(2) One NII staff attended the 9th Annual International Conference on Open Repositories (OR2014) (2014/6/9–13, Helsinki, Finland).

1.2.3 Support for SCOAP^3

With the launch of SCOAP^3 in 2014, NII confirmed the intention of Japanese university libraries to participate in this consortium and ascertaining their relevant contact information. We also collected contribution fees and paid them on behalf of these partners.

The SCOAP^3 Governing Council met at CERN on December 17, 2014. Following on the

conversion of 10 high-energy physics journals to open access in January 2014, progress made during the first year was reviewed. From Japan, Professor Emeritus Takahiko Kondo of High Energy Accelerator Research Organization and SPARC Japan Managing Director Jun Adachi of NII participated in the meeting as members.

A total of 39 participated in the meeting, including nine remote participants and five observers. During the past year, the number of memoranda of understanding increased from 19 to 43, three of which were concluded with international organizations. In terms of participating libraries, this covers more than 2,500 libraries. Currently, 34 Japanese libraries are participating. During the past year, the total amount of contributions increased from 2.8 million euros to 4.17 million euros. These figures represent annual contribution payments. It should be noted that the goal for contribution payments is set at 5 million euros, while the expected level of contributions from Japan is set at 390,500 euros.

The number of scientific articles converted to open access by SCOAP^3 has been steadily growing. The number of articles published in the aforementioned 10 journals was 3,552 in 2011, the base year for computation of contribution amounts; and the number of such articles is expected to reach 4,287 in 2014. This means that the average effective article processing charge (APC) will fall to about 81 percent or 1,068 euros. This is lower than the APC level of gold open access journals.

Regarding the standards of SCOAP^3 journals, satisfactory quality standards are being upheld in terms of Digital Object Identifier assignment, Creative Commons license attribution, and file format. Disclosure of the SCOAP^3 repository and its Application Programming Interface has also been started.

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.

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. On November 4, 2014, NII hosted the first ORCID Outreach Meeting to be held outside of Europe and the United States. NII Professor Hideaki Takeda attended the ORCID Board Meetings held in May and November 2014 and participated in activities for promoting the use of author identifiers.

1.2.6 Study of a pilot project for open access support

We prepared a report on the survey of APCs in Japan conducted in fiscal 2013. The report was published in May 2014 and was presented at the 1st SPARC Japan Seminar.

1.2.7 Publication of Fiscal 2013 SPARC Japan Annual Report

Activities undertaken during fiscal 2013 were summarized in an annual report (Japanese version) published in July 2014.

1.2.8 Improvement of Website

Decisions were made to release the materials and minutes of the Steering Committee Meetings held in fiscal 2014 and to retrospectively disclose materials from past years as well.

2 Record of Meeting

2.1 SPARC Japan Governing Board

Date	Agenda
January 15, 2015	1. Summary of minutes of the last meeting (draft) 2. Interim report on the activities of SPARC Japan in fiscal 2014 3. Plans for the activities of SPARC Japan in fiscal 2015【discussion】 4. Policy for the activities of SPARC Japan in the future【discussion】 5. Others
March 19, 2015	1. Summary of minutes of the last meeting (draft) 2. Interim report on the activities of SPARC Japan in fiscal 2014 3. Plans for the activities of SPARC Japan in fiscal 2015【discussion】 4. Policy for the activities of SPARC Japan in the future【discussion】 5. 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
Mitsuaki Nozaki	Professor, High Energy Accelerator Research Organization, (KEK)
Hiroshi Imai	Professor, Graduate School of Information Science and Technology, University of Tokyo
Naohito Abe	Professor, Institute of Economic Research, Hitotsubashi University
Keiko Kurata	Professor, Faculty of Letters, Keio University
Syun Tutiya	Professor, National Institution for Academic Degrees and University Evaluation
Shigefumi Mori	Professor, Research Institute for Mathematical Sciences, Kyoto University
Masahiko Sekikawa	General Manager, The University of Tokyo Library
Hideyuki Seki	Manager, Keio University Media Center
Kazuhiro Hayashi	Senior Research Fellow, National Institute of Science and Technology Policy
Jun Adachi	Deputy Director General, Director, Cyber Science Infrastructure Development Department, National Institute of Informatics
Koichi Ojiro	Deputy Director, Cyber Science Infrastructure Development Department, National Institute of Informatics

3.2 Working Group for SPARC Japan Seminar 2014

Name	Title / Affiliation
Tomonari Kinto	Librarian, The University of Tokyo Library
Hisao Sunaoshi	Librarian, Tokyo Institute of Technology
Yasuyuki Minamiyama	Librarian, National Institute of Polar Research
Taro Misumi	Librarian, Chiba University Libraries
Hiroshi Horii	Chairman, Academic Repository Network
Kazuhiro Hayashi	Librarian, Nagoya Institute of Technology Library
Shinji Mine	Senior Lecturer, Faculty of Humanities, Law and Economics, Mie University
Eriko Amano	Research Administrator, Research Administration Office, Kyoto University
Sho Sato	Assistant Professor, Faculty of Social Studies, Doshisha University
Ikuko Tsuchide	Librarian, Osaka University Library
Eisuke Enoki	Lecturer, Department of Pathology, Faculty of Medicine, Kinki University
Yui Nishizono	Librarian, Kagoshima University Library

4 Record of SPARC Japan Seminar 2014

	Date / Place	Title	Speaker	Attendees
1	August 4, 2014 13:00～17:00 National Institute of Informatics	“How Do We Face APCs? — Perspective of APCs Through Trends and Surveys In and Outside of Japan —”	○Tomonari Kinto (The University of Tokyo Library) ○Toshihiro Inoue (Kyoto University Library) ○Hideki Higuchi (Asahikawa Medical University) ○Misa Hayakawa (Japan Atomic Energy Agency) ○Shinji Mine (Mie University)	129
2	September 26, 2014 13:00～17:00 National Institute of Informatics	“Institutional Open Access Policy : Toward the Development of Japanese Models”	○Eriko Amano (Kyoto University Research Administration Office) ○Shinji Mine (Mie University) ○Stuart M. Shieber (Harvard University) ○Kazuhiro Hayashi (Nagoya Institute of Technology Library) ○Miki Terada (Japan Advanced Institute of Science and Technology) ○Anders Karlsson (Elsevier Global Academic Relations) ○Antoine E. Bocquet (NPG Nature Asia-Pacific) ○Yui Nishizono (Kagoshima University Library)	82
3	October 21, 2014 13:30～17:00 National Center of Sciences, Lecture Hall	“Science for ‘Generation Open’” Open Access Summit 2014 -Open Access Week 2014 “Generation Open”-	○Ikuko Tsuchide (Osaka University Library) ○Hideo Iwasaki (Faculty of Science and Engineering, Waseda University) ○Toshiyuki Yamada (Yoshihiro Yonezawa Memorial Library, Meiji University) ○Shinichirou Takezawa (General Healthcare Inc.) ○Shoji Komai (Nara Institute of Science and Technology (NAIST)) ○Daiki Horikawa (Keio Research Institute at SFC) ○Sho Sato (Doshisha University)	76
4	March 9, 2015 13:00～17:00 National Institute of Informatics	“What Should We Do to Expand Green Content?”	○Taro Misumi (Chiba University Libraries) ○Yasuyuki Minamiyama (National Institute of Polar Research) ○Syunsuke Yamashita (Kyoto University, C-PIER) ○Hideaki Takeda (National Institute of Informatics) ○Hiroshi Horii (Academic Repository Network) ○Kazuhiro Hayashi (National Institute of Science and Technology Policy)	68
	Total			355
	Average			89

5 History

Fiscal Year	Council / Governing Board Meeting	Event	Related Event / Others
2003	06/25 The 1st Council Meeting		
		07/02 Briefing on Project Concept for Academic Societies, at Japan Education Center	
	07/14 Recruitment of Participating Journals		
	08/01 The 1st Governing Board Meeting		
		08/19 Briefing on Project Concept, at Tohoku University	
	09/11 The 2nd Governing Board Meeting		
	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
			11/20 Japan Council of National University Libraries Task Force on E-Journal started negotiation with publishers in Biological Science, Physics, and Medicine.
		01/21-29 Briefing on Project Euclid, at National Center of Sciences, Tohoku University, Kyoto University and Nagoya University	
		02/23 SPARC Japan Meeting Report and Briefing on Concept of New Journals at National Center of Sciences	
		03/11 SPARC Japan Seminar "Future Perspective of Scholarly Communication in Biological Sciences -UniBio Press Mission", at The University of Tokyo library	
	03/22 The 3rd Governing Board Meeting		
	03/23 The 3rd Council Meeting		
2004	05/28 The 1st Governing Board Meeting		
	06/02 The 1st Council Meeting		

	06/07 Recruitment of Participating Journals		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
	09/15 The 2nd Governing Board Meeting 09/22 The 2nd Council Meeting (Adoption of Participating Journals)	07/07 Briefing on Project Concept for Academic Societies, at National Center of Sciences 09/27 Project Euclid Meeting, Briefing on DPubS	
	10/14 Joint Meeting of Working Groups	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	
		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	10/19-20 Participation in the Project Euclid DPubS Conference, at Cornell University, US
		11/05 OUP Meeting "Current Situation of Open Access" 11/25 The 6th Library Fair & Forum "Trends in Scholarly Communication: Open Access and Self-Archiving", at Pacificio Yokohama	
		01/27 Workshop "Business Models for E-Journals and Trends in Scholarly Publishing", at Japan Education Center	
	03/07 The 3rd Governing Board Meeting		
	03/10 The 3rd Council Meeting	03/24 Symposium "Current Trends and Issues around SPARC: Scholarly Journals, Institutional Repositories and Open Access", at Waseda University	
2005	06/06 The 1st Governing Board Meeting	05/19 The 1st SPARC JAPAN Seminar 2005 "Learning from history of Nature - Editorial Policies at Nature"	

	06/08 The 1st Council Meeting	06/29 The 2nd SPARC JAPAN Seminar 2005 "J-STAGE Online Submission and Review System"	06/21-22 Participation in the JISC International Solutions for the Dissemination of Research, London, UK
		07/09-10 Closed Workshop "E-Journals: Current Usage and Future Prospects" at Keidanren Guest House	07/07-08 Elsevier Library Connect Seminar 2005, "Understanding Users", in Kyoto and Tokyo, Supported by NII
		07/15 The 3rd SPARC JAPAN Seminar 2005 "Theory and Practice of Open Access - Researchers, Library, Academic Journals"	
		07/20 UniBio Press Initiatives: New Business Model at Academic Societies, sponsored by Ibaragi University Library	
			09/15 Yamaguchi University Library Lecture 2005 "Status of E-Journals and scholarly communication in Japan - Role and Activities of SPARC Japan" Sponsored by Yamaguchi University Library
		09/22 The 4th SPARC JAPAN Seminar 2005 "How do we launch and publish e-journals? -challenges for academic societies and publishers"	09/16 Symposium on E-journals "Management of academic resources in University: for transforming scholarly communication in era of E-journals" at Kyoto University, Co-Sponsored by Academic Center for Computing and Media Studies, Kyoto University Library and NII
	10/13 The 2nd Governing Board Meeting	10/06 The 5th SPARC JAPAN Seminar 2005 (The 76th Annual Meeting of the Zoological Society of Japan) "What should researcher React? - in the era of E-Journals" at International Congress Center, Co-sponsored by the zoological Society of Japan	
	10/26 The 2nd Council Meeting (Adoption of Participating Journals)		
		11/24 Special Session of The SPARC JAPAN Seminar "Briefing and Demonstration of Online Submission and Review System: Journal of Bioscience and Bioengineering"	
		11/30 The 6th SPARC JAPAN Seminar 2005 (The 7th Library and Forum) "COUNTER project: Setting International Standards for Online Usage" at Pacifico Yokohama	
		12/01 Closed Workshop on COUNTER project	12/09 Nagasaki University Library Lecture 2 "Latest Trends in Scholarly Communication: Role and Activities of SPARC Japan", Sponsored by Nagasaki University Library
		12/12 The 7th SPARC JAPAN Seminar 2005 "English Reviewer in Academic Journals in Japan"	

	02/15 The 3rd Governing Board Meeting 02/24 The 3rd Council Meeting	01/31 The 8th SPARC JAPAN Seminar 2005 "Trends and Technical Standards in Scholarly Communications: Google Scholar, CrossRef, OAI-PMH etc." 02/10 The 9th SPARC JAPAN Seminar 2005 "Wrap-up Session by SPARC Japan Partners"	
2006	09/08 The 1st Governing Board Meeting 01/30 The 2nd Governing Board Meeting	06/30 The 1st SPARC Japan Seminar 2006 "Academic Community in Japan: Views from Overseas Publishers" 07/26 The 2nd SPARC Japan Seminar 2006 "Promotion of E-Journal and Licensing: Worldwide Trends and Outlook for Japanese Journals" 09/05 Lecture "Introducing ALPSP" by Ms. Sally Morris 09/29 The 3rd SPARC Japan Seminar 2006 "Evaluating Online Submission System-Before and After-" 11/02 The 4th SPARC Japan Seminar 2006 "Request from University Libraries to Publishers: COUNTER as an Example" 11/20 The 8th Library and Forum Fair "TRANSFER Update: to improve procedures and policies surrounding transfer of journals" at Pacifico Yokohama 12/14 The 5th SPARC Japan Seminar 2006 "Copyright: for Academic Societies, Authors and Institutional Repository" 12/18-19 International Symposium: Future of Institutional Repositories, e-Science and the Future of Scholarly Communication "Standing on the Shoulders of Digital Giants" at Toshi Center Hall 01/30 The 6th SPARC Japan Seminar 2006 "Promotion of E-Journal and Licensing (2) Tips from the Experts"	03 MOU Conclusion with The Association of Research Libraries (ARL) 07/03-04 Elsevier Library Connect Seminar 2006, "From " Search" to "Find" -, in Tokyo, and Osaka, sponsored by NII

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

		06/24 The 2nd SPARC Japan Seminar 2008 "Academic Publishing and the Approach to XML - Issues in Japan" 07/10 The 3rd SPARC Japan Seminar 2008 "The Status of Consortium in Korea - For Expanding our Global Presence" 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 10/14 The 5th SPARC Japan Seminar 2008 "What is the most appropriate OA model for Japan?" 11/17-18 SPARC Digital Repositories Meeting 2008, Baltimore, US Co-hosted by SPARC, SPARC Europe and SPARC Japan 11/25 The 6th SPARC Japan Seminar 2008 "Beyond IF - we need some different perspectives" 11/27 The 7th SPARC Japan Seminar 2008 (The 10th Library Fair & Forum 2008, Scientific Information Open Summit) "Open Access Update" 12/16 The 8th SPARC Japan Seminar 2008 "E-Journal Platforms that fit the requirements in Japan"	06/26 Participation in the 55th General Assembly of JANUL (Japan Association of National University Libraries), at Tohoku University 07/13-15 Participation in The General Conference of the Chinese Chemical, Tianjin, China 08/17-19 Participation in the 236th ACS (American Chemical Society) National Meeting & Exposition, Philadelphia, US 09/11-12 Participation in the General Conference of JASPUL (Japan Association of Private University Libraries), at Kokugakuin University 09/16-20 Participation in the 2nd EuCheMS Chemistry Congress, Torino, Italy 09/25-26 Presentation at KESLI (Korean Electronic Site License Initiative), Daejyon, Korea 10/12-15 Promotion at the 15th North American ISSX (International Society for the Study of Xenobiotics) Meeting, San Diego, US 10/27-30 Participation in ISAP2008 (International Symposium on Antennas and Propagation), Taipei, Taiwan 11/13-14 Participation in the INFOPRO2008, at National Museum of Emerging Science and Innovation

	12/24 The 1st Governing Board Meeting 03/10 The 2nd Governing Board Meeting 03/27 Joint Meeting / SPARC Japan Publishing Partners 03/27 The 3rd Governing Board Meeting	01/22-26 Project Euclid-Mathematics Journals Meeting at National Institute of Informatics, Kyoto University and Tokyo Institute of Technology 02/13 The 9th SPARC Japan Seminar 2008 "Report from SPARC Japan Partners"	12/17-20 Participation in the International Conference on Embedded and Ubiquitous Computing (EUC 2008), Shanghai, China 03/16-20 Participation in the 2009 APS (American Physical Society) Meeting, Pittsburgh, US
2009	 10/05 The 1st Governing Board Meeting	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" 08/04 The 2nd SPARC Japan Seminar 2009 "Sustainability of non-profit publishers - learning from OUP" 09/08-09 The 3rd SPARC Japan Seminar 2009 (RIMS Workshop) "Towards a Digital Mathematics Library" 09/17 The 4th SPARC Japan Seminar 2009 (Annual Meeting of the Zoological Society of Japan) "ZS Project" 10/20 Open Access Week (The 5th SPARC Japan Seminar 2009) "An open access business model and researchers' attitudes" 11/11 The 6th SPARC Japan Seminar 2009 (Library Fair & Forum) "NIH Public Access Policy" 12/11 The 7th SPARC Japan Seminar 2009 "Status of Social Sciences Journals - Issues of IR, Copyright, E-journals" 02/02 The 8th SPARC Japan Seminar 2009 "Marketing to Libraries Worldwide"	 11/25 SPARC Japan Publishing Partners in Chemistry Participated in the APBioChEC (Asia Pacific Biochemical Engineering Conference) 2009, at Kobe Convention Center 12/03-04 DRF International Conference 2009 (DRFIC 2009), Co-hosted by DRF and NII, at Tokyo Institute of Technology

	03/23 The 2nd Governing Board Meeting	02/03 ALPSP Training Course "Effective Journals Marketing"	
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

	03/16 The 1st Governing Board Meeting	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"	
2011	10/06 The 1st Governing Board Meeting 03/27 The 2nd Governing Board Meeting	10/28 The 1st SPARC Japan Seminar 2011 (Open Access Week) "Current Situation and Strategy of Open Access from Viewpoints of Journal Publishing" 12/06 The 2nd SPARC Japan Seminar 2011 "Workshop for Contemporary Reference Management Tools" 01/31 The 3rd SPARC Japan Seminar 2011 "New Movement of the Distribution on Scholarly Information - Open Access for Researchers and Academic Societies" 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" 02/29 The 5th SPARC Japan Seminar 2011 "Burgeoning Open Access MegaJournals" 03/26 The 6th SPARC Japan Seminar 2011 (Project Euclid & Mathematical Society of Japan, Joint Workshop) "Workshop on Mathematics Publishing"	08/28-09/01 Participation in the 242nd ACS (American Chemical Society) National Meeting & Exposition, Denver, US 09/04-09 Participation in the 14th Asian Chemical Congress 2011, Bangkok, Thailand 10/26 Presentation at the 2011 Open Access Korea (OAK) Conference, Seoul, Korea by Jun Adachi "Open Access in Japan: 2011 Updates"

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

	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

6 Publication

6.1 SPARC Japan NewsLetter

・SPARC Japan News Letter No. 22, Sept. 2014
http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter22E.pdf
・SPARC Japan News Letter No. 23, Oct. 2014
http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter23E.pdf
・SPARC Japan News Letter No. 24, Nov. 2014
http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter24E.pdf
・SPARC Japan News Letter No. 25, Mar. 2015
http://www.nii.ac.jp/sparc/en/publications/pdf/sj-NewsLetter25E.pdf

6.2 Reference for SPARC Japan Seminar 2014

【The 1st SPARC Japan Seminar 2014】August 4, 2014
"How Do We Face APCs? - Perspective of APCs Through Trends and Surveys In and Outside of Japan -"
http://www.nii.ac.jp/sparc/en/event/2014/20140804en.html
Opening Greeting/Outline: Tomonari Kinto, The University of Tokyo Library
"Overview of Two Surveys Conducted in FY2013 on Open Access Journals"
Toshihiro Inoue, Kyoto University Library
"Case Study on Keeping Track of APC Payments at a Small University Library"
Hideki Higuchi, Asahikawa Medical University Library
"Case Study in the JAEA Library of Submission Fee Grants and Central Management of Publication Data" Misa Hayakawa, Japan Atomic Energy Agency
"International APC Trends" Shinji Mine, Mie University

【The 2nd SPARC Japan Seminar 2014】September 26, 2014
"Institutional Open Access Policy: Toward the Development of Japanese Models"
http://www.nii.ac.jp/sparc/en/event/2014/20140926en.html
Opening Greeting/Outline: Eriko Amano, Kyoto University Research Administration Office
"Open Access Policies: An Up-to-Date Summary" Shinji Mine, Mie University
"How Scholarly Communication Goals Affect the Design of Open Access Policies"
Stuart M. Shieber, Harvard University
"Learning from University of Liège's OA policy"
Kazuhiro Hayashi, Nagoya Institute of Technology Library
"A Case Study from the JAIST Repository"
Miki Terada, Japan Advanced Institute of Science and Technology

“Open Access Development at Elsevier: An Update”
Anders Karlsson, Elsevier Global Academic Relations
“Macmillan Science and Education (MSE): An Open Research Publisher”
Antoine E. Bocquet, NPG Nature Asia-Pacific

【The 3rd SPARC Japan Seminar 2014】 October 21, 2014
“Science for ‘Generation Open’” -Open Access Summit 2014-Open Access Week 2014
http://www.nii.ac.jp/sparc/en/event/2014/20141021en.html
Opening Greeting/Outline: Ikuko Tsuchide, Osaka University Library
“Biomedia Art; an alternative approach for biological science”
Hideo Iwasaki, Faculty of Science and Engineering, Waseda University
“Niconico Gakkai β and the open sharing of research information on the web”
Toshiyuki Yamada, Yoshihiro Yonezawa Memorial Library, Meiji University
“Science postprint; an open access scholarly journal in Japan”
Shinichirou Takezawa, General Healthcare Inc.
“Young Academy as an open platform for imagination and creation”
Shoji Komai, Nara Institute of Science and Technology (NAIST)
“Future Prospects; from outside of Academia” Daiki Horikawa, Keio Research Institute at SFC

【The 4th SPARC Japan Seminar 2014】 March 9, 2015
"What Should We Do to Expand Green Content?"
http://www.nii.ac.jp/sparc/event/2014/20150309.html
Opening Greeting/Outline: Taro Misumi, Chiba University Libraries
“A Path to Data Management by Libraries”
Yasuyuki Minamiyama, National Institute of Polar Research
“Initiatives in a University Museum for Open Access to Information on Academic Materials”
Shunsuke Yamashita, Kyoto University Unit of Synergetic Studies for Space
“Institutional Repositories and DOI: Assignment of DOI in JaLC”
Hideaki Takeda, National Institute of Informatics

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The 1st SPARC Japan Seminar 2014

"How do we face APCs?

— Perspectives of APCs through trends and surveys in and outside Japan"

Monday, August 4, 2014: National Institute of Informatics
12th floor conference room (Attendees: 129)

The 1st SPARC Japan Seminar 2014 focused a spotlight on Article Processing Charges (APCs). The presentations included a report on two surveys in Japan on open access (OA) journals, as well as case study reports by university libraries and research institutions that do APC processing. Three reports shed light on the current situation in Japan, and one report introduced worldwide APC trends and possible scenarios for financial support for APC. Participants then discussed how to deal with APC issues down the road. As shown also by SPARC Japan survey results, Japan has been slow to consider APCs and formulate open access policies, making it hard to see this as an urgent issue; but it is hoped that, with this seminar as a primer, discussion on APC initiatives will lead to application and practice editions. A summary of the seminar is given below. See the SPARC Japan website (http://www.nii.ac.jp/sparc/event/2014/20140804.html) for the handouts and other details.

Presentations

Overview of Two Surveys Conducted in FY2013 on Open Access Journals

Toshihiro Inoue (Kyoto University Library)

1. SPARC Japan "Survey on Submission to Open Access Journals"

a. Questionnaire survey

Researchers in the natural sciences at 44 universities were surveyed. They included institutions publishing large numbers of articles in OA journals as well as several research universities outside the field of medicine.

Summary of Survey Results

・The percentage of articles published in OA journals varies greatly from one field to another.

・For researchers, whether or not a journal is open access is not an important factor in deciding where to submit an article; instead, the decisive factors continue to be "recognition in the field," "matching of article to journal's scope," and "provision of appropriate peer review." Researchers are submitting their articles to OA journals that meet these criteria.

・Among the additional comments written in on the questionnaire were calls for subsidies from the government or university level in light of the "expensive publication cost," and for involvement in an institution-funded model.

b. Interview survey

To obtain a more detailed picture of the situation, library personnel and others involved in publication were interviewed at a number of the universities included in the questionnaire survey, with the cooperation of their schools.

Summary of Survey Results

・University libraries are aware of APC-related issues. Libraries also believe that this awareness is making its way to researchers.

・Most university libraries are not involved in APC payments; nor are there moves to learn about the payment situation.

・There were no institutions reporting the existence of a university policy on open access. A major issue will therefore be how to go about strengthening the dissemination of research results and obtaining resources including OA journals.

Proposals by SPARC Japan

・It will be necessary to keep track of journal payments by the university as a whole, not only traditional subscriptions costs but also APC payments.

・Stakeholders will need to consider an institution-funded model for APCs and suitable price setting.

The role of libraries, in addition to obtaining journal subscriptions and supporting research results dissemination through institutional repositories, should also extend to OA journals with author-paid APCs.

2. Report on results of FY2013 survey by Japan Association of National University Libraries (JANUL) Committee on Scholarly Information, Subcommittee on Scholarly Information Distribution: Current State of Open Access Journals and Publication of Scholarly Articles - Database Survey

Covering both APC and non-APC OA journals and subscription-based journals, the publishing of articles in the natural sciences was surveyed based on Web of Science SCI (Science Citation Index) data.

The survey determined the three-year trends in number of articles over the ten-year period from 2003 to 2012. Using data on SCI WoS Categories (WC), comparisons in each category were made between Japan and the rest of the world.

Summary of Survey Results

· Both the number of journals and number of articles continue to grow. Prior to the survey it was supposed that as OA journals increased, subscription-based journals would decline; but in fact both increased.

· The number of OA journals is still small, ranging between 3 and 9 percent of the whole depending on the field. It is growing rapidly, however.

· Subscription-based journals continue to be the most common, at more than 90 percent. Subscription costs are still a concern for libraries.

Looking at the number of scholarly articles for each country, over the 10-year period of the survey the United States, UK, and Germany grew slightly (1.29, 1.30, and 1.35 times, respectively), whereas China rose sharply (3.85 times). Japan, on the other hand, saw a slight decline (0.98 times). While these results are of some concern, it is possible that the number of low-quality articles is growing, and that numbers alone are not the whole story.

Proposals by the Subcommittee on Scholarly Information Distribution

· With the number of subscription-based journals remaining large, the emphasis should continue to be on negotiations with publishers, and subscription frameworks should be established at universities.

· The number of OA journals is growing rapidly, but attention should be paid to APC and the like.

· The situation should continue to be monitored carefully by conducting regular surveys.

Case Study on Keeping Track of APC Payments at a Small University Library

Hideki Higuchi (Asahikawa Medical University Library)

Scholarly Article publication fees and reprinting fees are considered to be service fees like fees to participate in academic conferences, and are in many cases processed by a division other than the library, such as the finance or accounting department. Who processes APC payments? If it is considered a materials fee the library is responsible, whereas the finance or accounting department handles it if it is seen to be a service fee.

At the University of Electro-Communications where the author previously was employed, the majority of data was collected in the library, but the APCs were counted in the financial accounting system, with the cooperation of the finance department. Since small universities tend to have a uniform financial accounting system, the APCs can pretty much be determined by searching for the strings “publication fee,” “academic journal,” and “reprinting.”

The Asahikawa Medical University initiative went a step further. By declaring in the school that from 2013 the library would handle all payments of publication fees and reprinting fees, information concerning article submissions became concentrated in the library. Since this initiative also led to administrative improvements, the library received an award from the head of the Administration Bureau.

In fiscal 2013, there were 102 articles by the Asahikawa Medical University that were published. Of the 55 articles with publication fees in Japan and overseas, 6 were APC. The APC total was 1,115,000 yen. In some cases, publication fees include reprinting fees, but because of the complexity these are not distinguished. It helps if there is a receipt with the publisher’s name on it, but in some cases people use PayPal or other payment services in which the settlement agent is recorded as a recipient. With hybrid journals, moreover, there is always the possibility that an article was published as open access, so these checks have to be made for all articles. The process ended up being more trouble than expected, requiring a full two days.

Even if APC information is not all collected in the library, as long as the APC was processed by the university the information will certainly be somewhere at the school. To obtain this information, a general estimate can be made at some level of precision or other, provided that accounting data can be gathered effectively from the relevant departments. Additional means may

need to be considered, however, in case there are articles published in journals that do not charge publication fees, or fees were paid out of pocket and the details cannot be determined.

Case Study in the JAEA Library of Submission Fee Grants and Central Management of Publication Data

Misa Hayakawa (Japan Atomic Energy Agency)

At the Japan Atomic Energy Agency (JAEA) library, information on R&D results by JAEA personnel is centrally managed and financial aid is provided for submission fees and the like. The JAEA employment regulations stipulate that when personnel announce R&D results, including in scholarly journals, permission must first be obtained from the JAEA.

Before and after announcing R&D results, researchers register information with the R&D Results Management System developed and operated by the library. The registered information is used for three purposes: deciding permission to announce the results, issuing the results information, and conducting financial aid-related procedures. Since registering information is a condition for financial aid, it is possible to get a rather high percentage of information on researcher submission and publication status.

The objectives of the financial aid program include supporting young researchers and creating a level playing field across research divisions for publication opportunities. The library division is in charge of obtaining, executing, and managing the budget for this program. Looking at the payment situation for April and May 2014, the average submission fee payment per article was 58,000 yen for domestic journals and 94,000 yen for overseas journals. This amount is inclusive of reprinting fees, since these cannot be distinguished. An example of APC payments is the hybrid journal of the Atomic Energy Society of Japan (US$2,950). Others including the IEEE and PLOS are rather more expensive than the above average.

Centralizing the budget process in the library has the advantage that researchers can publish their results regardless of the size of the research group's budget. Administrative procedures are also more efficient, as they are all handled by the library. Since payments all go through the library, it is easy to keep track of information; and knowing the kinds of journals in which results are published helps in selecting journals to subscribe to.

An issue is obtaining funds. There are limits as to how much can be covered by the library budget alone, since it is obtained without assuming APC payments. The regulations state that APCs for hybrid journals are not covered by the aid program, but such cases can be discussed individually if there is a particular desire.

The involvement of the library increases exchanges with researchers and helps to shrink the distance between the library and researchers. Presumably the program also makes it easier for researchers to ask the library when they have questions about APCs or other matters.

International APC Trends

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

・Background in the UK

Viewed from the outside, the debate in the UK concerning what type of open access (OA) to adopt (APC-based OA or Green OA) may seem like a game, a battle, or power politics. While the administration took a cue from the Finch Report in deciding to support APC-based publication, BIS (the Department for Business, Innovation & Skills) has expressed the view that the Finch Report ought to be revised. RCUK, Wellcome Trust, and other large research funding agencies in the UK devise and implement their OA policies based on Finch, whereas the REF (Research Excellence Framework), for which the Higher Education Funding Council for England (HEFCE) is responsible, calls for putting the results of research for assessment not in OA journals but in institutional repositories by 2020. The future outlook is far from clear.

・APC Trends

A paper by Björk, investigating APC prices, found that there are two peaks. Those in the US$601–800 ranges and those around $1,601–1,800 or $2,000 are frequent. Different surveys, however, show quite different APC prices, with field-dependent variation.

In the case of hybrid journals, charging methods have become diverse and there are differences among publishers. There was also a bundling approach, combining APC with subscriptions, by which APC payment was waived or discounted; and this was introduced by the Max Planck Institute. The consensus is growing, however, that this approach has failed. Of the articles registered in Scopus, no more than 0.5 percent are OA articles published in hybrid journals. Hybrid journals also have the problem of double dipping. Although it is said that the price is reduced by the amount of APC paid, there are doubts that this is really the case.

・Publisher Trends
Publishers have come up with a number of services for getting articles published by means of APCs. Similar to APC member discounts, there are publishers offering APC discounts to researchers through contracts with universities.
・Researcher Trends
The publishing experiences of researchers differ by field and by country, but the numbers are believed to have risen somewhere around the years 2009 to 2011. Presumably this is because OA mega journals and major commercial publishers began providing OA-related services.
Comparing the results of the SPARC Japan survey and the Wiley survey of worldwide authors regarding factors for article submission, in both cases the authors did not choose an OA journal primarily because it was open access but gave weight rather to "recognition in the field," "matching of article to journal's scope," and "Impact Factor."
・Research Funding Agencies
Since April 2013, RCUK has given block grants to universities in support of APC payments. With plans to provide 100 million pounds of funding over a five-year period, the target is to achieve Gold OA for 75 percent and Green OA for 25 percent of the funded research results. The APC funding amount was set at 17 million pounds for the first year and 20 million for the second year, with the third year amount to be decided after discussion about the results.
Funding by the Wellcome Trust covers articles in peer-review scholarly journals and also monographs and book chapters. The policy is that within six months following publication not in institutional repositories but in PubMed Central (USA/UK) and the like, articles are to be made freely available. Influenced by the Finch Report, the organization promotes OA journals over self-archiving, and provides Open Access Awards (APC grants) to 32 universities in the UK.
・Universities
Alongside this policy-based approach in the UK, an organized APC initiative is being carried out mainly by Jisc. The Jisc APC pilot project ended just this past July. In the pilot project, an APC payment system was tried out in cooperation with universities, publishers, and research funding agencies. Another project, Jisc Monitor, is currently being trialed. In order to ensure compliance with the OA policies of REF2020, this project is providing infrastructure for monitoring research output at each university, checking compliance with OA policies, and determining costs, as well as creating metadata standards.
In the UK, both the number of APC articles and the total amount of APC payments rose sharply in 2013. This no doubt reflects the impact of RCUK and the Wellcome Trust. Looking at the amount of payments per publisher, major players such as Elsevier, Wiley, PLOS, OUP, and Springer stand out. Payments to the top two amount to around a million pounds per year. The average APC payments per publisher are in the range of 1,500 to 2,250 pounds a year.
How much is paid out by the Wellcome Trust for APC? Supporting 559 articles in full OA journals and 1,569 in hybrid journals, the average APC payments were 210,000 yen and 340,000 yen, respectively. In this case, too, the top two publishers for APC payment amounts were Elsevier and Wiley.
There are 107 universities eligible for block grants from RCUK, with most of the grants going to famous universities. The top 30 schools received around 80 percent of the total amount.
There are moves to create an organized workflow for APC payments at UK universities. It has progressed to the point of establishing a flow clarifying who does what in APC payments at each university. Both the monetary amounts and the amount of processing being quite large, this is not something that can be handled using an ad hoc approach.
COPE [Compact for Open-Access Publishing Equity], a US movement, is an agreement on the provision of APC grant programs by research institutions. As the number of university libraries participating in COPE increases, it is hoped that a permanent APC funding program can be established. With universities providing the environment, the aim is to achieve a level playing field for both OA journals and subscription-based journals. At Harvard University, this compact has been implemented as HOPE. It is restricted to journals listed in the DOAJ and publishers who are members of the OASPA, with grant amounts limited to US$3,000 per person per year.
・APC Financial Assistance Scenarios
Based on the Wellcome Trust report by Björk et al. last March, the following are some of the scenarios by which research funding agencies might offer APC assistance.
1. APC repayment schemes
APC assistance is provided by paying the full amount. All the money goes to the publisher. In the case of hybrid journals, the APC amount paid by the agency is guaranteed to be

deducted from the subscription charge.
2. Multilevel cap schemes
APC payment amounts are capped at different levels based on the quality of the journal. One proposal is to set three price cap levels (US$1,000, $2,000, and $3,000) for full OA journals in Scopus, based on the SNIP metrics (Source Normalized Impact per Paper) of Scopus scholarly journals. In reality, looking at the average APC for journals classified by SNIP factor, most can likely be covered by a rate of $2,000 or less.
3. Burden-sharing schemes
Research funding agencies cover a fixed percentage of APC costs, with the rest paid by the university and/or author.
·Conclusions of Report
In the APC market, price competitiveness should be guaranteed even while maintaining innovativeness. If APC costs were to be fully and unconditionally covered, researchers would use funds indiscriminately, price competition would suffer, and publishers would push up the price.
It would be possible for some publishers to bundle subscription costs and APC, but it would then no longer be possible to know how the APC was calculated and something like the APC Big Deal could arise.
In the case of hybrid journals, the question is whether the subscription price is really being reduced. In the present state with the Big Deal being the mainstream, nondisclosure clauses make it impossible to know how much each university is paying, and difficult to achieve a drop in price. As the amounts paid by research universities, which produce large numbers of articles, are increasing, the problem is free-riding by universities that publish fewer articles.
·Conclusion
The APC is not a pressing issue in Japan like it is in the UK; but as questionnaire surveys and article surveys indicate, among researchers the submission of articles to OA journals involving APC payments is clearly growing more common. To decide how to handle APCs, we need to be aware of international trends and of what kinds of initiatives are being taken by each research institution. APC payment information should be shared in Japan and globally. It is laudable that UK university data is being made public. This helps ensure APC transparency and competitiveness. Intermediaries are also necessary. Can JUSTICE fill this need in Japan?

Panel Discussion

Moderator: Tomonari Kinto (University Library, The University of Tokyo)
Panel members: Toshihiro Inoue (Kyoto University Library) / Hideki Higuchi (Asahikawa Medical University Library) / Misa Hayakawa (Japan Atomic Energy Agency) / Shinji Mine (Mie University Faculty of Humanities, Law and Economics)

The moderator, Mr. Kinto, advanced the discussions along four topics by posing questions to the panel members.
1. Japan's researchers and Gold OA/APC
Regarding the point that researchers do not choose OA journals because they are open access, Mr. Inoue said that in terms of what is to be gained from publishing, OA is not inevitable. Mr. Mine noted that choosing journals based on their quality and field is common worldwide, and that in another survey the reasons for choosing an OA mega journal included the speed of peer review and the desire to release research results quickly, bringing the risk of submitting to a "predatory" publisher without realizing it.
On the question of whether there were differences even in the same field, Mr. Higuchi noted that in the case of the engineering field, at least, researchers on networks and supercomputers tend to value oral presentations at international conferences over article publishing itself. Ms. Hayakawa said that at the JAEA, as well, there are some areas where articles are common and others where issuing of technical reports is mainstream.
2. Determining the number of Gold OA articles and APC payment amounts at universities and research institutions
To give an example of how universities keep track of the number of OA articles, a representative of Kyushu University made a comment with reference to Kyushu University and Mr. Sunaoshi of the Tokyo Institute of Technology offered further details.
As reference in selecting e-journals, Kyushu University purchased data from Scopus and uses this data to keep track of the number of articles published by the university's researchers. The number of articles in OA journals is then found by matching against the 857 APC-based OA journal titles listed in the recent SPARC Japan survey. Kyushu University was compared with global trends and Japan trends in number of articles, and trends in number of OA articles per department at the university were described.

On the issue of keeping track of APCs, Mr. Inoue noted that at large universities there is no single approach, with the diversity of payment methods at different departments making it difficult to obtain accurate data. Mr. Higuchi reported that at Asahikawa Medical University, a great deal of labor goes into checking the revised personal versions submitted by authors to find the name of the journal and whether it is issued as an OA journal or hybrid journal. Mr. Mine said the situation outside Japan, in countries where more progress has been made in the provision of OA-related databases and funding conditions, makes it easier to keep track of information than in Japan (even though it is still a lot of work).

3. Who are involved in APC (about stakeholders)?

Speaking about the role of the URA (University Research Administrator), Mr. Higuchi suggested that since the URA can be expected to choose journals for submission and joint research partners so that the percentage of articles in the top 10 percent and the international authorship rate will be higher, the URA and library ought to work together in promoting submission to OA journals.

Speaking on grants at the JAEA, Ms. Hayakawa explained that when it comes to payment of outside funds such as Grants-in-Aid for Scientific Research, the library only checks documents and the actual payment is made by another department which is responsible for outside funds.

4. Model for institutional burden/involvement and fund sources

Regarding APC prices, Mr. Higuchi introduced two cases of price setting for network services.

One is digital certificates (using an SSL server). There are three types of certificates depending on the use, with prices ranging between 200,000 yen to a few thousand yen. These prices reflect differences in the level of the security review procedures and relate to differences in the reliability of the certificate itself. With OA journals, price competition should operate so that people use journals that are of high reliability even if the cost is high due to peer review, but they do not use journals with high price and poor reliability.

The other case is radiko.jp. This is an example of a service that was originally free but now charges for listening outside the broadcasting area. Even though it was originally free, a for-fee service will be supported if it offers additional value.

Mr. Mine offered an additional comment on his earlier presentation regarding the three scenarios, explaining that the report included the nuance that if university libraries do not take sufficient care when dealing with APC, publishers will take advantage of the situation, as in the case of subscription fees to e-journals, raking in more and more money. Another comment offered was that the provision of metrics for journal reliability and quality was a chance for the library community to demonstrate its prowess.

Making a comment from the floor about researcher awareness of costs, an attendee noted that the detachment of users (researchers) from payers (library) has pushed up e-journal costs. The attendee also suggested that if the same thing were to happen regarding APCs, it might be better to leave APCs more to researchers, who would either choose not to pay if they cannot afford to, or would choose a journal that is affordable. A variety of views were expressed by panelists. One panelist felt that given the current trend by universities toward creating a framework for canceling journal subscriptions, they would eventually realize the wisdom of leaving APCs to researchers. Another panelist offered that if money were handed out to researchers, they would end up wasting it on things like adding color pages to their papers, since it was not out of their own pocket. Another thought that institutions need to keep track of the costs of journal subscriptions and APC payments as the total amount of outlay involving scholarly articles.

Finally, Mr. Kinto made a proposal about the interim approach institutions should take to deal with APCs.

After gaining an awareness of international trends and gathering information on government policy and the policies of research funding agencies, he suggested that institutions should

- find out how much is paid in APCs,
- conduct dialog with stakeholders inside and outside the university, and
- in preparation for the appearance of an APC institutional model, draw up an OA policy, including a Gold OA, for the university.

On this basis they should carry out the system design and funding source planning for APCs. With that proposal, the panel discussion was concluded.

-------From attendees----------

(people affiliated with universities libraries)

- Regarding the Asahikawa Medical University case, I had assumed that if surveys were conducted you would wind up with an approach like this, but it was useful to have it explained anew. As for the JAEA case, I was surprised to learn that there is an institution doing processing so intelligently. On the APC question, I got the impression that it would be easiest to start out with small institutions and those specific to certain fields. As with the final discussion, though, I am still conflicted as to whether now is really the time for our library to get involved in this issue.
- Regarding APCs, I gained some hints about information gathering and cooperation with faculty

members.
- While the seminar offered much to think about, it would seem there is still a need to build a common awareness about APCs as the audience's reaction was flat.
- I came to feel that if subscription prices for subscription-based (hybrid) journals are going to be reduced, there would be value in conducting sample surveys of APC payment amounts. (Without that merit, it would be difficult to carry out in our situation.)
(researcher in academic society)
-I believe that reports on the detailed survey results would be useful for further studies.
(person in academic society, involved in scholarly journal editing)
- The information I learned at this seminar will be useful background when deciding on APC adoption. Since many submissions are by universities, it will help in understanding universities' thinking.
(person affiliated with corporate library)
- Along with the shift from printed journals to e-journals, there is now a new trend toward open access, driven in part by the price increase. The workload of journal staff at the library is decreasing. Possible areas where they can find new duties are APC management and management of research results.
(university educator)
- This was an instructive seminar in clarifying the current state and issues for APCs.
- As I listened to the discussion today, I thought it would be interesting to discuss Institutional Research, OA with APC, and OA without APC, as well.

---------Afterword----------

I would like to thank Kyushu University for providing slides.
With SPARC Japan surveys showing that university libraries are only starting to realize the implications of APCs for their services, I wondered how this seminar would go. I was relieved that participants offered so many positive views in response to the seminar.

Hisao Sunaoshi
(Tokyo Institute of Technology Library)

Thanks to all who braved the summer heat to attend this seminar. Inasmuch as Japan is slow to adopt an organized approach to APCs, I hope this was a step forward in sharing issues among people from various standpoints.

Tomonari Kinto
(University Library, The University of Tokyo)

APC is not as pressing a matter in Japan as it is in the UK, but I believe it will be necessary to continue keeping abreast of the trends.

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

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The 2nd SPARC Japan Seminar 2014

"Institutional Open Access Policy: Toward the Development of Japanese Models"

Friday, September 26, 2014: National Institute of Informatics
12th floor conference room (Attendees: 82)

The number of governments, funding agencies, and institutions adopting open access (OA) policies is continuing to grow, with over 350 OA policies registered in ROARMAP as of July 2014. Although the policies and their scope vary widely, they play an important role in promoting open access to research results. In Japan, there is also growing debate about OA at the government policy level, along with gradual progress in the drawing up of OA policies by the government and funding agencies on such issues as guidelines for the promotion of OA by the Japan Science and Technology Agency (JST) and mandating that doctoral dissertations be made available on the Internet. Universities, meanwhile, face a variety of issues although institutional repositories themselves are on the increase. For example, growth in scholarly articles other than bulletins remains slow and understanding of OA has failed to improve among researchers. The question for Japanese universities overall is how they should deal with such issues.
At the 2nd SPARC Japan Seminar of 2014, participants sought clues from earlier examples of policy creation and the current situation of OA in and outside Japan, discussed the significance and effects of OA policy setting at universities for promoting OA in Japan in the future, and shared ideas about future directions.
A summary of the seminar is given below. See the SPARC Japan website (http://www.nii.ac.jp/sparc/en/event/2014/20140926en.html) for handouts and other details.

Presentations

Open Access Policies: An Up-to-Date Summary

Shinji Mine (Mie University)

Until recently, the distribution of scholarly information was done within a closed group consisting of researchers, universities and libraries, academic societies, and publishers; but open access has added governments, research funding agencies, as well as ordinary citizens and taxpayers to that mix. OA policy has to be devised with these stakeholders in mind. In the West, the number of funding agencies adopting OA policies is growing, and more than 70 percent of publishing companies also allow self-archiving. Among universities, some pioneering institutions have had OA policies for more than a decade. While there are two main approaches, the Liege model linked to assessment processes and the Harvard model of open access by default, there are many different variations based on the university culture and institutional arrangements.

The data shows that the percentage of papers deposited in repositories varies widely between institutions that mandate OA policies to those that do not. Some institutions have achieved an average rate of 60 percent with mandatory OA. It must be recognized that even when OA is mandatory, this does not mean all papers will be archived, and that "encouragement" policies have only limited success.
In Japan, OA policies have been set by the Ministry of Education, Culture, Sports, Science and Technology (mandating open access to doctoral dissertations), JST among funding agencies, and among universities, Okayama University, Hokkaido University, JAIST, and Nagoya Institute of Technology. What is needed next is to resolve the difficulties in policy implementation by sharing experiences, and to build up the knowledge necessary for assessing and designing policies. There are also many things to be done after drawing up policies on OA. Setting OA policies is no more than opening up the potential of OA, but that potential is great indeed.

How Scholarly Communication Goals Affect the Design of Open Access Policies

Stuart M. Shieber (Harvard University)

The aim of researchers is to return research output to society, and for this reason the communication of scholarly information plays an important role in scientific research. After first of all examining the goals of scholarly communication from the

standpoint of theory and principles, I would like to discuss the kinds of prescriptions necessary for designing OA policies in line with these goals.

The most important goal of a scholarly communication system is sustainability, based in financial soundness. Next is openness, making information available as widely as possible. The third goal is freedom, enabling authors to make use of research output in a variety of ways. And fourth is efficiency, to keep down the costs of satisfying the first three conditions.

Among scholarly journals, the foundation of scholarly communication, there are currently toll-access journals (those limiting access to readers who subscribe to them) and open-access journals (those available on line for free, with authors paying the APC [article processing charge]). How do these two types compare from the standpoint of the above four goals?

To be sustainable, the cost of peer review, manuscript editing, publishing, and infrastructure must be recovered. A journal cannot be considered sustainable if it does not show a profit in the short and long term. Comparing toll-access journals and OA journals, both are able to recover costs in the short term and realize profits. Toll-access journals, however, over the past decades have been in a state of hyper-inflation, calling into question their long-term sustainability.

As for openness, among toll-access journals there are even cases where reuse for research purposes is restricted. Similarly, from the standpoint of author freedom, the rights of authors themselves to distribute their papers are limited. Regarding efficiency as well, a comparison of statistical data shows that with commercial publishers central to toll-access journals, the price per page and price per citation are very high. Average profits per paper are also higher for toll-access journals than for OA journals. The comparisons make it clear that OA journals are preferable from all four standpoints, so that in designing OA policies, a policy of promoting the switch to OA journals should be adopted.

In making such a switch, it is necessary (1) to mitigate the phenomenon of ending up with less than the desirable volume of access and (2) to support the transition from subscription-based to open access; moreover, (1) must not be allowed to interfere with (2).

Harvard's OA policy is a good example of how to mitigate the phenomenon.

Harvard University's policy consists of three elements:

1. Authors grant the university a nonexclusive, transferable license to distribute scholarly articles.
2. Rights can be transfered back to authors, and authors can obtain a waiver of the license at their own discretion.
3. The university can make available the articles to which it has a license.

In this way, the default position has been reversed. Up to now, the default position has been that authors did not retain their rights unless they opted in to retain them, but with this policy the default position is that authors retain their rights unless they opt out. Harvard University introduced this policy in the Faculty of Arts and Sciences in 2008. Today some 19,000 articles are archived, nearly all of them as open access. This number continues to grow steadily, and demand is also high with around four million downloads to date.

Next is the policy for encouraging a switch from toll-access journals to OA journals. Two important factors in designing such a policy are for publishers to provide an environment enabling the transition from subscription to OA journals, and for institutions to take the responsibility for providing funds for making available research output. In science, engineering, and medical fields, governments and private funding agencies provide the funds, while in the humanities and social sciences it is the universities that fund such activities.

So what kinds of policies should funding agencies and universities have? Thinking in terms of the above four goals, it is important in the short term to provide funds that will encourage the transition to OA, and in the long term to provide funds that will help create a more desirable OA market. It is necessary, that is, to provide funding that allows for sustainable and reasonable publication fees to support the kind of publication that guarantees research output will be made available as OA and to promote the transition to OA journals. Given the role of universities as major research funders in the humanities and social sciences as noted above, it is necessary for universities themselves to have this kind of policy. Harvard manages a fund based on COPE (Compact for Open-Access Publishing Equity) for paying publication fees to OA journals. A number of other universities have also signed COPE, and each of them have set up similar funds. Funding organizations also need to adopt such policies, but designing the optimal policy is difficult. I hope Japan will achieve the right kind of policy design.

To summarize, the main points I would like to emphasize are designing a policy that will encourage

Green self-archiving, paying for the costs of promoting OA journals, and not providing financial support to subscription journals or hybrid journals, which only delays the transition to OA journals.

Learning from the University of Liège's OA Policy

Kazuhiro Hayashi (Nagoya Institute of Technology Library/DRF)

Since 2012, the Nagoya Institute of Technology has been implementing a policy by which research papers are in principle archived in a repository. In studying and implementing the system, we learned much from the system of the University of Liège. I would like to report on our studies, while comparing the University of Liège's policy with the situation at our school.

The OA policy of the University of Liège has come to be called the Liege model, and is known as an ideal form of Green OA. The most characteristic feature of the University of Liège's OA policy is that only research output deposited in the repository is eligible for assessment in the university, advertising, and grant application. In implementing the system, in principle the researchers themselves archive their works, as well as perform the rights checking for publishers. The reason for this approach is to encourage understanding of OA among researchers themselves and get them to take an active role in promoting it.

While this imposes an administrative burden on researchers, the workflow for archiving articles has been designed for usability, and a wealth of tools are available so that the archived information can be used effectively. The policy is also backed by active advocacy, including calls for OA in the blog of the university president.

Comparing this situation to the system at Nagoya Institute of Technology, our system can be seen as having the following issues. Whereas the University of Liège makes the repository itself the object of assessment, at our school, the articles archived in the repository are in principle those for which article information has been entered in the researcher database, which is closely tied to assessment. Since this workflow consists of waiting for article information to be entered by researchers, after which the library performs registration in the repository, it tends to result in a time lag between the release of papers and their being made public in the repository and in a weakening of researcher awareness of OA. Some way of dealing with these issues is needed.

A Case Study from the JAIST Repository

Miki Terada (Japan Advanced Institute of Science and Technology Library)

JAIST does not make archiving mandatory but has boosted its article offerings in its repository by revising the collection process. The repository, which was made public in the 2007 academic year, currently makes available 8,229 items. Today I would like to talk about the scientific journal articles that comprise around 20 percent of the holdings.

Initially, researchers had to request registration of their papers, but the number archived was small. So in the 2008 academic year a new policy on collection of research papers was adopted. Under the new policy, unless a faculty member otherwise specifies, the school may archive in the repository all papers registered in the research achievements database. As a result, registering of papers in the repository was carried out with university-wide consent. The reason for basing this policy on article information in the research achievements database is that practically all researchers enter such information, and around 80 percent of faculty members periodically update their article information. To make the registration process more efficient, the papers to be archived were classified based on publisher policy and the status of subscription to journals by the library. As a result, it became possible to register nearly four times as many articles as before. There were many other benefits besides the increase in the number of articles, such as the establishment of a collection policy and method, a schedule, and a university-wide promotion structure, as well as the storing of records on inquires to publishers and an increase in faculty members registering articles.

Collection of full text, on the other hand, which was handled by email, involved considerable effort and the collection rate was still low. To solve this issue, in 2010 mandatory repository-related items were added to entries in the research achievements database along with a full-text upload function, and publisher policies were automatically displayed upon entry of the publisher name, for greater efficiency.

The advantages of the collection policy are the effectiveness for collecting past articles and greater

ease of contacting faculty members. Since, however, the amount of work up to the time articles become available to the public remains the same, the process will need to be made more efficient and a means must be found to simplify full-text submission by faculty members. Nonetheless, JAIST has established procedures for making research papers available and the number of items registered is increasing steadily.

Response of Publishers to Institutional Open Access Policies

Open Access Development at Elsevier: An Update

Anders Karlsson (Elsevier Global Academic Relations)

Today I would like to talk about open access policies in Elsevier, given the overall advance of OA, and what we are doing in relation to repositories. Open access content in Elsevier has grown by around 20 percent from last year. Currently, we publish 117 OA journals, nearly all our journals are hybrid, and Green OA is supported by nearly all the journals.

We operate under the three principles of academic freedom (letting authors freely choose the method of publication), reducing the administrative burden, and not creating an infrastructure in which duplication will occur. Related to repositories, we are carrying out pilot projects in three areas, providing metadata, providing embedded full text, and automatically making papers public when the embargo period ends.

Green OA is not free. In reality it is covered by library subscription fees. There are also embargo periods. We are an OA publisher offering a variety of choices. We intend to continue working with the community to provide solutions that maximize the freedom of researcher choices and minimize their burden.

Macmillan Science and Education (MSE): An Open Research Publisher

Antoine E. Bocquet (NPG Nature Asia-Pacific)

First of all I would like to explain why the Nature Publishing Group (NPG) regards open access as important. The reason is that a greater variety of choices for open research enables us to provide higher quality publications. Publishing as OA makes the distribution of scholarly information transparent, easier to make use of, and more immediate. Joint research is accelerated as a result and has a greater impact on society. We believe this is in line with the mission statement announced when Nature was launched, namely, contributing to the growth of the scientific community and conveying the significance of science to society.

Here I would like to announce that NPG has made *Nature Communications*, which was a hybrid journal, into a fully open access journal. Even before this, NPG had set out a number of OA policies, such as the decision in June 2005 to allow repository archiving following an embargo period of six months. In 2011, we launched *Scientific Reports* as an OA journal on the PLOS ONE model. Also this year we started the Nature Partner Journals program enabling various academic societies and universities to publish high-quality OA journals. Amid the accelerating expectations and needs for OA journals, the business model of hybrid journals faces many issues. To continue providing the highest level of editing and services, we intend to devote our efforts to the creation of sustainable OA publications.

Panel Discussion

Are Institutional Repositories Helped by Open Access Policies at Universities?

Moderator: Yui Nishizono (Kagoshima University Library/DRF)

Panel members: Shinji Mine (Mie University) / Stuart M. Shieber (Harvard University) / Kazuhiro Hayashi (Nagoya Institute of Technology Library/DRF) / Miki Terada (Japan Advanced Institute of Science and Technology Library) / Anders Karlsson (Elsevier Global Academic Relations) / Antoine E. Bocquet (NPG Nature Asia-Pacific)

Four years ago when we held a symposium on the theme of OA policy, we likewise invited Mr. Shieber to join us. The panel discussion this time accordingly started off by talking about the changes in the open access situation over the past four years since that earlier symposium. Mr. Shieber said the most welcome change during this time has been that publishers have started to see OA journals as an important business model and are switching over to them. On the other hand, noting that many journals have not yet made the switch to OA he asked the panel members from the publishing world when they would go to 100 percent OA journals.

The following responses were given by publisher members. With a high percentage of submitted

papers being rejected in peer review, maintaining quality is driving prices higher. In the case of OA, the cost of peer review for rejected papers ends up being covered by authors whose papers are adopted; but considering this situation, authors cannot be asked to pay high APC rates. If, however, there were subsidies for Gold OA, promoting the switch to OA would be possible.

The discussion then turned to Gold OA, with Mr. Shieber offering the following view. The costs of OA should be paid by funding agencies and universities, but what the Finch Report recommends cannot be considered sustainable. Rather it gives subscription journals an incentive to remain. Harvard provides financial support for the costs of submission to OA journals, but excludes hybrid journals and restricts the support to research funded by the school's budget. If this approach were to be adopted by all institutions without capping the budget, it could cover 40 percent of the papers published each year.

Mr. Karlsson responded by pointing out that in the current situation, subscription, hybrid, and pure OA journals exist side by side, but if hybrid journals were to disappear, authors would be limited in their choice of publication methods. Mr. Bocquet said that, as a publisher, so long as a good result is obtained, the cost of producing quality journals is worth the investment. He also noted that if the publishing of researchers' papers were to become commoditized, there is a possibility of publishers becoming solution providers, offering ways of discovering good papers.

The discussion then returned to the original topic, with panel members exchanging views on the role to be played by repositories given the existence of so many different kinds of journals today, and on the benefits of OA policies. The moderator, Ms. Nishizono, posed a question about the benefits of OA policy, noting that in Japan, while the percentage of journal articles among repository content is still small overall, it is larger in those universities that have set OA policies. Mr. Hayashi confirmed that the effect is indeed large. He said that researchers prefer OA, but are put off by the complex procedures, by the amount of work it takes before papers are made public, and by copyright concerns. When a system is drawn up that clarifies the procedures, the greater simplicity results in a major increase in registrations of journal papers.

Finally, Mr. Mine asked Mr. Shieber whether he felt Green OA alone was insufficient. Mr. Shieber replied that with strong enough promotion Green OA alone could have an influence on the switch to OA journals, but that he was not confident relying on this alone would be enough, and suggested a system supporting the transition to Gold OA was necessary. Mr. Mine further asked the publishing members whether Green OA was putting pressure on publishers. They replied by pointing out the difficulty of institutional support of Green OA, noting that it was easier to do so jointly with funding agencies.

The panel discussion closed by confirming that in OA design at universities it was important to contribute to current OA promotion while monitoring the development of Gold OA and trends in funders' OA policies.

-------From attendees----------

(people affiliated with university libraries)

- I came to see the need for reconsidering Green OA and Gold OA and rethinking strategy, questioning the emphasis on promoting Green OA. It was quite valuable.
- As we are planning to start up an institutional repository, it was useful to see the importance of policy.
- It was good to hear from publishers about their stance toward OA although that was slightly off-topic. About OA policy, just as there are already examples of OA policy adoption as in the UK, it seems to me Japan should consider what road to take before listening to the situation of publishers.
- I would like to have heard more about Green OA. Learning about some of the early case studies was especially useful.

(university educator)

- Presumably there were time constraints, but it would have been nice to go a little deeper into the issues.

(other/people affiliated with libraries)

- This was a highly useful session as it provided an overview as well as presenting individual cases, and we heard also from the standpoint of publishers.
- As we are in the process of creating an institutional repository, it was helpful to learn about worldwide OA trends, benefits, and the experience of other repository projects.

(other/researcher)

- It was a good opportunity to think about the relationships among institutional repositories, research achievement databases, and open access policies.

---------Afterword----------

What I felt in planning this seminar was that when one starts thinking about OA policy and its implementation, it inevitably becomes necessary to think about the overall process of scholarly communication. What can universities and libraries do to steer this communication in a better direction? OA policy looks like it might be a key. While the seminar may have fallen short of your expectations, I would like to thank everyone who came to this event.

Kazuhiro Hayashi
(Nagoya Institute of Technology Library/DRF)

There was much to be learned from the people who took part in this seminar, and I think we have a better view of what we as university research administrators need to do, centering around OA policies. We will now be going ahead with various initiatives. As MC, I seem to have put too much of my strength into giving the overview in the initial five-minute introduction. I regret not doing a better job of time management after that, so that the final discussion ended up being shorter than we had planned.

Eriko Amano
(Kyoto University Research Administration Office)

There is no single answer to the question of how to promote OA effectively. While learning from the outstanding precedents and insights given, I believe we need to search for a form that is compatible with each culture. I hope this seminar has given us one starting point toward that end. I must apologize, though, for not being a better moderator of the panel discussion. As the introduction went on longer than anticipated, we did not have enough time to get into Green OA as much as we had planned.

Yui Nishizono
(Kagoshima University Library/DRF)

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The 3rd SPARC Japan Seminar 2014

Open Access Summit 2014 Part 1 “Science for ‘Generation Open’”

Tuesday, October 21, 2014: National Center of Sciences, 2F Lecture Hall (Attendees: 76)

The 3rd SPARC Japan Seminar of the fiscal year, held during Open Access Week, adopted “Science for ‘Generation Open’” as its theme. The presentations and discussions dealt with project concepts that go beyond the narrow sense of open access to focus on the actions of open access users. Thanks to the spread of open access and the advance of the web, we are already starting to see people conducting research by following their own interests, outside the auspices of a university, research institution, or other organization. Some of these so-called hobbyist researchers have produced higher quality results than even those of scientists working at organizations. The existence of these “researchers in the wild” raises some important questions about the role and significance of existing academic institutions.

The seminar featured presentations by five persons whose research work or support activities go beyond the framework of existing research institutions and of professional scientists, furthering discussions on these issues. It was clearly evident that research is changing today, and the seminar saw intense debate on the ideal framework for research in the future.

A summary of the seminar is given below. See the SPARC Japan website (http://www.nii.ac.jp/sparc/en/event/2014/20141021en.html) for handouts and other details.

Presentations

Opening greeting and outline

Ikuko Tsuchide (Osaka University Library)

For the past 10 years or so, discussions of open access have tended to focus on philosophical and policy matters. Meanwhile, in the web-based culture that is the everyday world of young researchers, students, and other young people, open content, engagement with the general public, and sharing of resources in a cloud environment have become a regular part of life. These kinds of behaviors have naturally made their way also to the world of academic research. Not only research output but also the processes leading to it are increasingly spreading outside the traditional boundaries of scholarly communication or academic disciplines. This is where the true concept of open access is being realized.

But what is it that the institutions (universities), their libraries, and academic societies, responsible for traditional scholarly communication, can do about this part that has extended beyond their boundaries? The answer is not yet forthcoming. We ourselves will need to look carefully to find out what is necessary. One purpose of this seminar is to introduce what is happening. I hope today’s meeting will prove to be exciting and energizing to all present.

Biomedia art, an alternative approach to biological science

Hideo Iwasaki (Faculty of Science and Engineering, Waseda University)

The question “What is life?” has long been a theme of the various fields of art. In his work *Butterfly Landscape* of 1957–58, Dali incorporated as a motif the double helical structure of DNA that had just been discovered around that time. In addition to being a biologist, I am also a paper-cutout artist, and I launched metaPhorest[1] at Waseda University as a bioaesthetics platform in 2007. Artists take up long-term residence at metaPhorest and produce art on life themes. This metaPhorest is also a place for life science experiments, productions, and research, sharing an experimental environment and seminars with scientists and students in life sciences. A variety of works come into being as a result.

The artists at metaPhorest do not simply make use of biological knowledge and materials but also conduct research based on their own natural motivation. This leads in turn to new light being directed on life sciences by artists. The processes by which works are

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[1] metaPhorest: http://metaphorest.net/?lang=en

created also become works of art. Research is a part of artistic expression. Laboratories are ateliers, and ateliers are laboratories. From this, one can get a sense of how science and art are each nested in the other. Art, which is an activity of human beings, who are part of nature, can be subjects of science, targeting nature; but science is also a part of art. Science and art, while mutually critical of and cross-referencing each other, are like opposite sides of a Möbius strip.

Transcending the boundaries between art and science, and the distinction between artists and scientists, bioaesthetics, which is expanding from DIY (do it yourself) to DIWO (do it with others), is very much in the spirit of open access.

Niconico Gakkai β and the open sharing of research information on the web

Toshiyuki Yamada (Yoshihiro Yonezawa Memorial Library, Meiji University)

Academic papers and research presentations are of interest to ordinary people, not just to scientists. In fact, research and academic papers can be seen as one kind of interesting content.

I used to be a librarian, and I discovered, in my work of cataloging journals received at the library, that the world is full of interesting academic papers. Using Twitter and the CiNii Articles API, I launched Ronbuntter[2] as a service that introduces papers on topics showing up as trending keywords in Twitter. What I found interesting is that even papers that might seem somewhat removed from the interests of ordinary people become more familiar when they are on topical themes. Ronbuntter currently has more than 6,000 followers, most of whom are probably not researchers. Academic papers have an appeal even for ordinary people.

One of my side-interests is analyzing and studying data from the Niconico video service [similar to YouTube], which has led me to take part in operating the web collective Niconico Gakkai β. Among the videos uploaded to the Niconico site, nearly 30,000, contributed by more than 8,000 users, are related to technology and research, including homemade electronics devices and programming. Even more than the technical novelty, people find the manner of description and presentation of interest.

In Niconico Gakkai β sessions, held for the first time in 2007, there are two methods of presentation. One is the "100 rapid-fire researches" by researchers at the forefront of their profession, and the other is "Casual research madness" which is solicited from the public. In the first method, for one hour five researchers each introduce 20 of their own studies, for a total of 100. This has high entertainment value, as the results of the past 10 or 20 years of research are presented in a few minutes, during which the researchers themselves come into view as people. In "Casual research madness," 10 to 20 persons give presentations of around three minutes each, from which selections are made by a panel and by viewers of Niconico live broadcasts. There were even cases of presenters being invited to appear at a public event of the AKB48 "girls group" or of research being used in overseas events.

Around 40 percent of the presenters are students, another 8 percent are educators, including university professors, and the remaining half are not scientists but people in other professions and those who conduct research for personal enjoyment. Many of the presenters have been conducting research or similar activities, but until now those other than professional researchers have been largely invisible. They have been made visible by social media. Now that there are ready means for conducting research and making the results public, so that research is something that can be conducted casually, the age where "every person in Japan is a scientist" may one day come.

Science Postprint, an open access scholarly journal in Japan: originating from SPARC and coming back to SPARC

Shinichiro Takezawa (General Healthcare Inc.)

After I obtained a doctorate in life sciences, I worked at venture companies and in other positions, and then founded General Healthcare Inc. in 2007. Inspired by a SPARC Japan seminar in 2012, I launched *Science Postprint*[3] at my company as an open access journal. Behind this project was the lack of a general academic journal in Asia that could become an academic research infrastructure, like *Nature* or *Science*.

It is estimated that by 2050 the number of academic papers produced in Asia will grow to half of the world's total, with a market scale of around 500 billion yen. In Japan, however, there is still a fixed notion that academic journals should be published by academic societies; moreover, the

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[2] Ronbuntter (@ronbuntter)
Twitter: https://twitter.com/ronbuntter

[3] *Science Postprint* : http://www.spp-j.com/

brand of existing journals like *Nature* is so strong that until now no one thought of publishing this kind of general academic journal. This is why Japan has had no general academic journal. By means of the open access journal *Science Postprint*, I hope to create an academic infrastructure for Japan and for all of Asia.

Due to a lack of funds and personnel, *Science Postprint* is currently suffering difficulties, and was even nominated for Beall's List,[4] but it is seeking to get past these challenges by becoming indexed in the PubMed database of life science papers and gaining impact factor. Future plans include introducing post-publication peer review, recognition, and a payment system of peer review cooperation fees, as earnest efforts are being made to expand the service toward realization of its objectives.

Young Academy as an open platform for imagination and creation

Shoji Komai (Nara Institute of Science and Technology [NAIST])

After giving an overview of the changing situation for research, the talk looked at the three M's of research activities: management, mentorship, and motivation. Across the board, researchers complain about not having time to pursue the various things they are interested in. With the strong demand for results in research funding, it has become difficult to provide the education and human resources development (including sharing the joy of intellectual exploration) that used to take place in university laboratories, for such reasons as the tenure system for young researchers. Having various routes and opportunities for becoming a researcher ought to be a good thing; moreover, research misconduct will not go away simply by tightening the screws. In this situation, networking among researchers is becoming all the more necessary.

I served as chair of the Young Academy of Japan[5] from its founding in November 2011 to the end of September 2014. The Young Academy, which is within the Science Council of Japan, is a network of early-career researchers in Japan. Our Young Academy was set up as we saw young researchers from countries throughout the world joining together to create such organizations as the Global Young Academy (GYA) of which I am a member. Inviting the participation of young members of other Japanese academic societies as well, our Young Academy takes up such themes as those in general science and cross-disciplinary areas that do not fall readily in the realm of any one academic society. We also hold workshops where we think together with high school and university students about the future of research. Based on the knowledge gained from these initiatives, the Young Academy provides comments to senior academic unions.

At this time when the environment for academic research is undergoing great change, I believe it is necessary to understand the world situation. By creating interfaces that connect young researchers with conventional research and other scientists, I hope it will give rise to various activities and create a world in which science is not walled off as a special activity but is seen as everyday and familiar. I call this "making science into culture."

Future Prospects from outside of academia

Daiki Horikawa (Keio Research Institute at SFC)

Focusing on movements outside academia and taking the standpoint of researchers and other players, the talk looked at how things will develop as information is made more open.

I am a freelance researcher, and so I do not receive a salary from a university. I provide academic information on my blog and other online means for free, and I receive income from an e-zine and the sale of goods.

Open access empowers researchers outside of academia, too. It becomes easier to increase the number of "fans" and "fellows" and to gather information. Contributions and other funds can be attracted readily, as a result of which your activities become even more energized. The people who are putting this into practice are called biohackers. Engaged in biology research outside academia, they are proposing and carrying out research projects in an open biospace. There is a very strong desire to share information. BioCurious,[6] for example, is a service in Silicon Valley where information and members gather and make use of crowdfunding to finance projects, such as creating artificial cheese for vegetarians.

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[4] Beall's List: http://scholarlyoa.com/publishers/. A list created by Jeffrey Beall, a librarian at the University of Colorado Denver. The list is known for identifying publishers suspected of predatory practices, namely, posing as publishers of open access academic journals but exploiting this position to obtain article processing charges (APC).

[5] Young Academy of Japan: http://www.youngacademy-japan.org/

[6] BioCurious: http://biocurious.org/

There are similar movements in Japan. One example is a project where several remote presenters and I collected travel expenses by means of crowdfunding so that we could pay for the travel expenses of invited speakers to a conference on insects which was streamed online at Niconico Gakkai β. Among the funders were housewives and NEET (young people who are "Not in Education, Employment, or Training"). The reason we were able to attract funding is that the presenters were people who made their own information open through blogs and the like. Otherwise we would not have been able to gather the necessary funds.

When researchers use blogs or SNS to disseminate information, they too are putting the open access concept into practice. They can issue information at zero cost, gather evaluations, and feed these back to their research. By means of Mushiblo,[7] a blog about insects, and the Twitter account Kumamushisan,[8] I aim to write articles and somewhat playful but useful tweets that draw wide interest in my research. I use these outlets also to sell stuffed animals (*kumamushi* = tardigrades or "water bears"), get subscriptions to my e-zine, and publish books.

Providing knowledge for free attracts feedback as well as human and financial resources, supporting independent research activities. By involving more people in the world of research, this kind of movement is helping to shrink the knowledge gap and further accelerate open access, which is sure to increase the sum total of human research activities.

Panel Discussion

Moderator: Sho Sato (Doshisha University)

Panel members: Hideo Iwasaki (Faculty of Science and Engineering, Waseda University) / Toshiyuki Yamada (Yoshihiro Yonezawa Memorial Library, Meiji University) / Shinichiro Takezawa (General Healthcare Inc.) / Shoji Komai (Nara Institute of Science and Technology [NAIST]) / Daiki Horikawa (Keio Research Institute at SFC) / Eisuke Enoki (Faculty of Medicine, Kinki University)

The panel discussion covered a variety of topics, from research funding, grant frameworks, as well as journal articles and peer review to biohackers (DIY biology researchers), academic expression, as well as open access and academies. Highlights are given below.

SATO: Before starting the discussions, let me give a self-introduction. In the field of library and papers. It's displayed for around half the papers. Actual donations are still quite rare.

YAMADA: Niconico has a scheme where the information science, I study open access. As a student, I analyzed the usage of open access articles deposited in institutional repositories, as a result of which I discovered they were widely used by the ordinary public. I conducted graduate research in 2007. I check Twitter, Facebook, Niconico, and other social network services daily. When I find something interesting, my default impulse is to share it with others. I'm 29 this year, and I believe I myself can be called part of "Generation Open."

We have asked for questions from the floor, so let's start with this one. Do you think your own activities require support from the national government?

HORIKAWA: If that's an offer, I'll take it. (*laughs*)

YAMADA: My own research is like a hobby. Niconico Gakkai β, where I am a member of the executive committee, participates in research that is supported by the government as joint research with universities and companies. When I was still working at the university, I had the opportunity to be involved in handling budgets for research expenses and so on in my work. The impression I received was that the conditions for government funding are generally so demanding as to make them difficult to use.

TAKEZAWA: Given the importance of funding for running an open access journal, I would welcome financial support. In the case of Kakenhi [Grants-in-Aid for Scientific Research], for example, there are grants that academic societies can receive that cover their costs of publishing e-journals, but corporations aren't eligible for the grants. I would like to see a wide range of support methods considered.

SATO: A question for Mr. Iwasaki. I realize this is something I should know, but what are the secrets for obtaining ordinary legacy research funding for the kind of research that you really want to do?

IWASAKI: If I write what I really want to do and fail to obtain funding, I give up. (*laughs*) In the past I was able to get funding because of the originality in combining life sciences and art, but this is becoming increasingly difficult. On the art side, I have applied also for overseas funding. I would like to try crowdfunding. It seems to me there should be government support for research that cannot be described with catchy copy.

SATO: Regarding crowdfunding, *SPP* (*Science Postprint*) has a donation button with articles, but in reality how much is being collected?

TAKEZAWA: First of all, the request for a donation button comes from the people submitting

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[7] Mushiblo: http://horikawad.hatenadiary.com/

[8] Kumamushisan: (@kumamushisan)
Twitter: https://twitter.com/kumamushisan

company providing the service pays small amounts of reward money based on the number of accesses and other factors. The key is whether the content becomes popular.

IWASAKI: Research funding projects in Japan are divided vertically among different walled-off government agencies, and there are no funding agencies that link different ministries. As for research fields, general universities lack art faculties, and there is no simple way of bringing together art and science. As a result, I feel the issue is the top-down manner in which connections are made.

SATO: Now a question for Mr. Komai. How do you think these kinds of activities can be connected in the Science Council?

KOMAI: Japan has not yet reached the level where these can be taken up at the policy or Science Council level, but for now I want to get a clear picture of what kinds of activities are currently taking place.

SATO: Next I would like to ask today's presenters to offer questions or comments on presentations other than your own.

IWASAKI: As someone in academia, I have a comment for Mr. Takezawa. In general with peer review, the text of the actual peer review is not made available anywhere, and there is no compensation for it (even though it takes up a large amount of time as part of academic activities). I would very much like to see *SPP* address this issue. You are thinking of paying back part of the proceeds to reviewers in the future. How much are you considering paying?

TAKEZAWA: First, we are going to implement peer review of articles after they have been published. Then we are thinking of ranking the content of the peer reviews and making payments on that basis.

IWASAKI: Even better would be for the reviews to be made public so that scientists can read them and see which reviews are good.

HORIKAWA: I have a question for Mr. Takezawa. I think it's great that you not only decided a general journal would be a good thing but actually went ahead and launched one. In what way is the journal being managed? How are you handling the processes of editing, assembling peer reviewers, and ensuring quality within the limited budget?

TAKEZAWA: Peer reviewers are experts in their field, and this is not something that you would expect to differ with the journal brand (so quality is guaranteed). As for the journal branding, we intend to gradually build up the peer review mechanism and achieve what other academic societies cannot accomplish. I believe if we proceed carefully, the recognition of these efforts will come eventually.

YAMADA: Regarding biohackers, I would assume with life sciences there are all kinds of difficulties from a bioethics standpoint. In the case of DIY biomedical experiments and research activities, I'm curious as to whether trouble arises and what kind of care is being taken.

IWASAKI: We are always worried about things like the risk of bioterrorism. Right now, however, at the stage of practical experiments where we are thinking about what new things might be possible if we make a certain thing, we are keenly aware in our laboratory that even if we try to make, for example, something outrageous, it's surprisingly difficult. At the same time, if we share the results of various experiments and methods for dealing with failures, they should also be useful as measures against risks. This is not possible when research is monopolized by universities or corporations.

TAKEZAWA: If someone wants to be a biohacker while holding down a regular job, how should they go about this?

HORIKAWA: The key is to create a venue by some means or other. Bring together like-minded people or make an appeal to the public about what you'd like to do. There are people doing weekend biology; then there is also the approach of earning piles of money (there are actually people outside Japan doing just that).

KOMAI: As someone doing conventional research, I'm thinking that I would like many different people to know about that research. I want it to be a means by which people find out ordinarily, not something like a science cafe where it won't be known unless it finds its way to some other place by outreach. I like what Mr. Iwasaki is doing, mixing in the fine arts as a familiar theme, and am proceeding by trial and error; but it's proving difficult to obtain broad participation. I would like to ask Mr. Iwasaki how he goes about awakening the interest of researchers in other fields and ordinary people.

IWASAKI: I think it's necessary to approach this from the stance of peer researchers. By default, scientists tend to start with a specific topic or to have a research question that will lead easily to a paper. Artists, on the other hand, start from a blank canvas and have to do something with the canvas. On that basis they are involved in showing a process, dealing with philosophical questions or with matters for which there is no answer. In that sense, artists may be more practiced at posing questions. One would expect both science and art to be alike, however, in starting out from curiosity. And academic papers are not the only means of expression.

SATO: While we are still in the middle of some highly interesting discussions, I would like to turn

our attention to the future. Let us hear your ideas about the future of research platforms and how to support young researchers. I'll first ask Mr. Enoki, who moderated the first half of the program, to comment.

ENOKI: I myself after doing embryology in the science faculty entered the faculty of medicine, and am currently a pathologist. I'm keenly interested in the status of bio-research and issues for young researchers. In my latest book, *Uso to zetsubo no seimei-kagaku* [Lies and despair in life sciences], I take up a recent Japanese slang term *piped*, referring to someone who is forced to spend all day with a pipette in hand performing experiments. It is emblematic of the situation in which young researchers in the biology field find themselves. As for what this word has to do with open access, young researchers cling to positions in academia and are under pressure in the workplace. I too suffered from the strong notion that if I left academia I would not be able to conduct research. Compared, however, to the 1990s when I was in that situation, I feel the walls around academia today have become considerably lower. I believe it is open access that has made this possible. Open access, in other words, has given young researchers the hope of being able to continue with their research regardless of whether they are inside or outside of academia.

SATO: I wonder if the lower walls mean that the winds of change are also blowing in academia.

KOMAI: We young scientists established the Young Academy of Japan because of the encouragement we were given by senior members of the Science Council based on international trends. There is movement in academia as well.

SATO: As a freelance researcher, what kinds of improvements would you like to see?

HORIKAWA: *Nature Communications* appears to have gone fully open access, and I would like to see journals adopt open access policies in that same way.

SATO: The article processing charges (APC) are rather high, though.

HORIKAWA: Still, when a branded journal goes open access, branding of the authors appearing in it becomes possible as well. I think it's fine to make an appeal on that basis.

SATO: Don't freelance researchers publish in journals?

HORIKAWA: I don't think the output necessarily has to be in the form of an academic paper. There is no obligation to compile a list of academic accomplishments.

SATO: In terms of research output, how are the results of funded art projects announced?

IWASAKI: With art, there are cases where artistic works are released; but outside Japan there are also looser forms such as discussions.

TAKEZAWA: It would be nice if journals allowed free participation by many kinds of people. Wouldn't it be interesting if high school science clubs could submit papers?

SATO: What kind of commitment can libraries make in response to these trends?

YAMADA: We need to stay attuned to what is going on so we can fulfill our role of collecting research output. It would be difficult to make specific commitments right away, while there are probably researchers out there who are still feeling their way along.

SATO: How about providing environments for knowledge production? Shared laboratories, for example.

YAMADA: That might be possible, if we can clear the political issues within the university, including whether such a task is the proper domain of a library.

SATO: We are running out of time, so I'll ask each presenter for a final comment.

IWASAKI: My hope is that people will come to appreciate that there are many forms of expression. I believe that is the gist of "making science into culture" (*on Mr. Komai's slide*).

YAMADA: In my previous work as a university librarian, I was interested in making knowledge open, and since moving on I have been able to remain involved in such activities. I have the feeling the world as a whole is heading in interesting directions.

TAKEZAWA: While running a scholarly journal, I have also pursued an interest in research misconduct. I believe making laboratory notes public can be effective for preventing such misconduct. Putting lab notes in the library and having them managed there might also be an interesting approach.

KOMAI: Traditionally libraries have a central role to play, and I believe that includes being a place that promotes knowledge creation also from a community standpoint. It would be interesting for them to act as a public place where various researchers can gather, or as a kind of collaboration office.

HORIKAWA: I think libraries should be able to function as one kind of community venue.

SATO: Thanks to all of you for today's discussion.

---------Afterword----------

This time we had Eisuke Enoki take part in our planning WG and were able to hold a seminar with a sterling cast of young researchers. And under the facile moderation of Sho Sato, the panel discussion took up one vital issue after another regarding research and science. We even had two water bears present, watching over the proceedings. All in all, it was a highly interesting session in which we heard that research is supposed to be enjoyable, that there are many ways of expressing the results, and that even "freelance" (amateur) researchers would announce their results if there were a platform for doing so.

My own interest, coming from my experience working in a medical library, is in a situation where one venue comes to be shared by people with different interests and viewpoints. Thanks to open access, such venues are increasing. If you see both libraries and the web as a kind of venue, I feel that this seminar has provided us with major hints about what we can do next.

Ikuko Tsuchide

(Osaka University Library)

I took part in planning this event without having ever participated in a SPARC Japan seminar before and without knowing what kinds of seminars had been held in the past. Learning that it would be a "festival" on the theme of open access, I decided it would be nice to invite people I wanted to hear talk and people I wanted to meet, and made suggestions about whom to select as speakers.

Mr. Iwasaki was someone I knew from my graduate school days, who has long been active outside the narrow framework of researchers. Of course, his research is top class, and he even has a laboratory in his home, as he carries on activities that easily cross the barrier between science and art. Mr. Takezawa, while holding a doctorate in life sciences, has not let his work be limited by the confines of academia. And then there is "Professor Water Bear" Horikawa, who by now has become famous in his own right. He is putting into practice the concept of doing research work in society. Listening to Mr. Yamada talk about Niconico Gakkai β, I felt that we may have come to the point where doctoral and other degrees are no longer meaningful. I felt a little sorry for Mr. Komai, asking him to represent academia at an event like this, but he convinced us that conventional science is also being stimulated by these trends.

I believe open access is empowering people like these and is providing a foundation on which the world will undergo change. It was a time to embrace hope for the future of research. I would like to continue keeping the flame alive into the future.

Eisuke Enoki

(Faculty of Medicine, Kinki University)

I knew the seminar would be held during the once-annual Open Access Week, and what's more, on the theme of "Generation Open," so I wanted to make it an enjoyable "festival" that would create ties between young researchers who are engaged in impressive activities in Japan and people who take part in SPARC Japan seminars. I hope everyone enjoyed it. For me personally, it was of the greatest pleasure.

That research is enjoyable and interesting, and becomes even more enjoyable when it is carried out while sharing with many people, I believe, is a feeling held by many researchers of my own generation. Today there is often the risk that that enjoyment will be crushed by feelings of irritation and entrapment from the pressure to produce results and by the virtually unchangeable structure of established academia; but I believe this seminar included some hints as to how to break out of that trap.

Sho Sato

(Doshisha University)

Today's participants have left comments on Twitter and on their blogs. Thank you very much.

<http://togetter.com/li/737570>
<http://cheb.hatenablog.com/entry/2014/11/09/225850>
<http://medister.info/doctorsblog/?p=1663>

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The 4th SPARC Japan Seminar 2014

"What Should We Do to Expand Green Content?"

Monday, March 9, 2015: National Institute of Informatics
12th floor conference room (Attendees: 68)

Opening access to the diverse academic resources resulting from scholarly research is demanded not only from an academic standpoint but as a response to the needs of society. Looking at the current situation regarding academic resources in Japan, however, there are still large gaps among different research fields and different institutions and organizations in their awareness of and motivation to achieve open access, as well as the state of its accomplishment. Moreover, in many institutions and organizations, the academic resources they generate are spread among multiple systems, making it urgent to devise a comprehensive management structure model for systematic promotion of open access.
Currently the majority of content archived in institutional repositories consists of scholarly articles, whereas actual research results include much more diverse materials including research data and specimens. In this seminar, the academic content made public and disseminated by scholarly research institutions in institutional repositories and by other means is first of all redefined as "green content." On this basis, we then tried to find specific ways of managing academic resources, including building collections and encouraging use, with the scope of open access expanded to research data (other than scholarly articles), metadata for museum materials, visual data, and the like. We hope the seminar was a first step toward coming to a common awareness of what open access to academic resources can mean in the future.
A summary of the seminar is given below. See the SPARC Japan website (http://www.nii.ac.jp/sparc/event/2014/20150309.html) for handouts and other details.

Presentations

A Path to Data Management by Libraries

Yasuyuki Minamiyama
(National Institute of Polar Research)

After "open access" was defined in the Budapest Open Access Initiative in 2002, activities in this area have spread widely, to the point where today in 2015 we can say there is no one in academic publishing who is unaware of this concept. In recent years, moreover, it is taking on a broader meaning under the keyword "open science," the expectation being that it will not stop with open access to scholarly articles but will come to include openness of the underlying data and research process. In this seminar, I would like to try to connect research data, museum materials, and other such "data" in line with the open science concept, with its hopes for innovation through knowledge recycling and reuse from open access to data and research processes, and for encouragement of collaboration with other industries.
Why is data so important in the first place? The concept of "data-centered science" has been proposed recently, emerging from the desire to make more effective use of data, which is both the basis and result of research. In data-centered science, scholarly articles are also treated as data, with the hope being that a cycle will arise by which new data is created based on collected large-scale, complex data (data-driven research). At the same time, the importance of the systematic management of data is coming to be recognized anew, in relation to the issue of research data governance, as an approach to dealing with research misconduct and achieving research transparency.
Overseas, funding agencies like the DCC (Digital Curation Centre) and RDA (Research Data Alliance), having been quick to recognize the significance of preserving and making available data like the above, are providing support for release of such data. Prompted by these moves, university libraries have also begun initiatives in this area. The University of Edinburgh in the UK and Purdue University in the US are among institutions that have launched data repositories and are actively supporting data availability. There are moves in Japan as well by the community of researchers, funding agencies, and museums to

make data available. Since around December 2014, there have been very active discussions, for example, in the Cabinet Office, the National Diet Library, and the Science Council of Japan. Against this background, we need to consider the role to be played by university libraries and specific ways of collaborating with other communities.

Initiatives in a University Museum for Open Access to Information on Academic Materials

Shunsuke Yamashita
(Kyoto University Unit of Synergetic Studies for Space)

Initiatives for Open Access and Linked Open Data are aimed at efficient sharing and exploitation of information, while also holding promise for the accumulation of additional information on the resources. Compared, however, to completed articles and journals, or information produced as an integral part of actual public services and the like, studies have not yet progressed on the more "labor-intensive" activities of producing information on academic materials such as those in museum collections and academic resource archives. I am involved in creating academic resource archives in the Kyoto University Museum. I described how, in a university museum, the research processes are closely related to the processes of creating and making academic specimens (the university museum is central to object-based research), and introduced the current reality of the around 2.6 million academic specimens in the Kyoto University Museum. In making academic materials information open, it is important to maintain and ensure the relationship "article→specimen, specimen → article"; and in the case of taxonomy, for example, when authorizing the new scientific name (publishing in a scholarly article), it is standard practice (Code of Nomenclature) to include information about voucher specimens also in the article. The Research Resource Archive currently being developed by Kyoto University is systematically archiving various materials collected or created in the education and research processes at Kyoto University, with the aim of making use of these materials as resources in new education and research. This project is collecting such materials as films and diaries that were outside the scope of existing repositories in the university, and is making them available vie Peek, the Kyoto University Digital Archive System. Using as an example the Hotta (Mitsuru) Movie Collection (from 1960 to ca. 1982), I showed the importance of associating plant specimens with film materials. In this regard, I noted that for making archives public it will be necessary to find solutions to such issues as assigning unique identifiers and dealing with the hierarchical nature of the archive materials (including hierarchical notation such as collection > series > item), as well as the cost burden of the processes for making information available. Looking at future prospects, I took up the CCR (Connection between Collection and Research) concept. The goal of the CCR is to provide an infrastructure for connecting a variety of specimen collections, not just type specimens (those used as evidence when proposing new biological species), to research results and data, and to create integrated connections between the research cycle and archiving cycle. This will make it possible to link open academic materials information on the Web to scholarly articles and publications or to materials archived in museums, and then make clear their relationships. When making academic materials open, how to bring together diffuse information and link it to actual scholarly activities, namely root materials like specimens, should be a major key. It will further be necessary to create schemes for encouraging and supporting the archiving of physical materials that involve costs. There is a strong need for progress in this field.

Institutional Repositories and DOI: Assignment of DOI in JaLC

Hideaki Takeda
(National Institute of Informatics)

Prior to the digital age, the final research output of scientists meant their scholarly articles, and data was no more than information for writing articles. With the rapid rise of digital archiving, however, an enormous volume of data has come into being, so that today data itself is research output, and articles and data are now becoming integrated. Following on theoretical science, experimental science, and simulation science, we are today seeing the emergence of data-centered science. In the case of simulation science and data-centered science, scholarly articles are no longer the research output but simply serve to introduce the research. The data itself is the research output. If we ask why research data should be made open, the reasons include (1) sharing research results

with society, (2) the public nature of publicly funded research results, (3) the continuity and further development of research results, and (4) ensuring reproducibility.

Among the layers of information infrastructure supporting the distribution of research data, the identifier at the top of metadata is growing in importance. There are many different metadata schema for describing data, and using only metadata to identify data and control its distribution is becoming increasingly difficult. Identifiers today include DOI and also ORCID (researcher identifier) and FundRef (identifier of funding agency), among others. DOI is a service that converts an identifier to a URI where the digital object is found. It was created originally so that publishers could share article identifiers, but today has grown into an identifier of various kinds of digital objects, not just articles. The advantage of the DOI service is that it provides a reliable means of access to content. This is of great importance to all stakeholders, from authors to readers, publishers, and funding agencies.

The service has a three-layer administrative structure, consisting of the IDF (International DOI Foundation) with overall governance responsibility, DOI Registration Agencies (RAs), and DOI issuers. CrossRef, one of whose missions is assignment of DOI to scholarly articles, is also an RA. Another RA is DataCite, which assigns DOI to data sets.

Japan Link Center (JaLC) is likewise an RA. When it was established in 2012, the first phase of its service was mainly assigning DOI to journal articles. Upon moving to a new system in December 2014, JaLC has drawn up policies enabling it to meet various DOI assignment needs in Japan. Of particular note is the expansion enabling DOI assignment to institutional repository content. The direction aimed for by JaLC DOI is to realize a DOI that can cover the entire range of researcher accomplishments. If, for example, DOI can be assigned to all results of the Grants-in-Aid for Scientific Research and other such programs, this should be useful to the researchers themselves and also to research institutions and funding agencies.

A test project to assign DOI to research data was started in JaLC in October 2014. The goals are to set policies on DOI registration of research data and establish an operational flow. It is the first project in Japan linking research data-related organizations across different fields. Research data involves many issues not faced by scholarly articles, such as metadata schema, data granularity, and the relationship between the data life cycle and actors. This project is now moving ahead on solving these issues.

Research output will eventually come to be “data” and the provision of a research data distribution infrastructure will be essential. The DOI is sure to become an important element as an indicator of that distribution.

Panel Discussion

Toward the Expansion of Green Content

Moderator: Hiroshi Horii (Academic Repository Network)

Panel members: Kazuhiro Hayashi (National Institute of Science and Technology Policy) / Yasuyuki Minamiyama (National Institute of Polar Research) / Shunsuke Yamashita (Kyoto University Unit of Synergetic Studies for Space) / Hideaki Takeda (NII)

Ahead of the panel discussion, Kazuhiro Hayashi of the National Institute of Science and Technology Policy gave a brief presentation titled “From Open Access to Open Science: An Overview and Main Policy Issues”; and the moderator, Hiroshi Horii of the Academic Repository Network, introduced initiatives related to academic materials. Summaries of their presentations follow.

HAYASHI: Starting in this decade, global society has moved from open access to open science, as we have entered an era in which ordinary citizens are consciously and unconsciously coming closer to science. Recent years have seen attempts such as in science communication to make a more active commitment to citizens, and a greater variety of stakeholders are becoming involved than were in the open access era.

The 4th Science and Technology Basic Plan does mention the promotion of open access, but the activities in response have been largely limited to creating institutional repositories and supporting digital archiving of academic journals. A major move took place in 2013, when Japan agreed to open up research data. This was at the G8 Science Ministers meeting in parallel with agreement to the G8 Open Data Charter.

Given these trends, what should we do next? Policy measures must not only be made with regard to science and technology but must spread to economic benefits, industry promotion, and educational benefits. Since open access is not necessarily to the advantage of researchers in all fields, the question of what should be open and

what should be closed needs to be considered from the standpoint of national interests. The time may come when those wishing to make data closed will be asked to provide a reason. The library industry will need to pay attention to trends in data journals, and new elements may emerge, such as research data quality and the degree of contribution of data producers.

HORII: At the Academic Repository Network (Re*poN), established in October 2014, people involved in academics in universities, companies, and elsewhere are working on projects to convert materials into data. To date, Re*poN has been creating digital archives of scientific laboratory instrument materials and of educational wall charts used in the Meiji to Showa periods (late 19th and most of the 20th century), and developing the virtual museum project of Kanazawa University. Through surveys and analysis of miscellaneous materials, creation of metadata and digital data, and exchanges across organizations, the aim is to build and maintain the information infrastructure. A case study of research data creation is the genealogical catalog of the Kaga feudal domain. Even though the extraction and digital archiving of data were funded by the Grants-in-Aid for Scientific Research program, the results were only available to the research community Kaga-clan Research Network. The issues for release to the general public include (1) accuracy and completeness as research data for general release, (2) permission for release from the archivers and others involved, and (3) the labor and cost burden of creating public data. Here the importance of the people in charge of forming and overseeing the data can be seen.

In the panel discussion that followed, participants offered their views from various standpoints on the theme, “Expanding Green Content.” Examples are given below for each topic covered.

Significance and purpose of expanding openness to academic resources such as museum materials and research data

TAKEDA: The trend toward openness is greatly facilitated by the changes in the international community. My personal interest is in how libraries and institutional repositories will respond and what kind of meaning they will find. This relates also to the issue of how far libraries can be involved in the research process. Academic fields are likely to become more and more specialized in the future, but I think it will be important to search for areas in common among the fields.

YAMASHITA: Museums have for some time been compiling materials databases and making them available. With the opening of data, this is a good time to think about how to connect the results up to now with other movements.

Priorities in making museum materials available

MINAMIYAMA: Making materials public and organizing them are central to a library’s mission; that is why libraries exist. That role does not change even though the materials are digital media.

HAYASHI: Without the development of industry in academic fields and related fields from openness, there can be no increase in research budgets. Speaking from the standpoint of how libraries should be involved in data, the quality control problem arising with data journals is not a matter of checking the contents of the data itself but relates only to format. Expertise in checking formats is something libraries have accumulated.

The path to openness

MINAMIYAMA: There is an urgent need to draw a line between open and closed, so as to make clear the scope of openness. In the case of libraries, it will be necessary to draw up, in cooperation with researchers, foundational policies regarding, for example, the range of data to be handled in the repositories. As for the practical aspects (and things will go much faster if librarians have a grasp of the main issues), we should first of all take them on in cooperation with graduate students and URA.

HAYASHI: For dealing with data, a data management plan is necessary. The library needs to be involved from the research planning stage, and one suggestion is to provide training for this. For policymaking, cooperation with URA should be carried out as an action plan.

Dealing with orphan museum materials

- What is to be done about materials for which a license cannot be obtained because the creator cannot be contacted?

YAMASHITA: This is a difficult issue. Our current approach is that at the time of call for proposals, we give priority to selecting those that can be made public or for which license processing is possible.

HAYASHI: The proper way to handle such cases is to make use of the Agency for Cultural Affairs compulsory license ruling system; but in the past when similar cases arose with scholarly articles, they were handled by making notification on the Internet. The thinking was that the risk of legal action was small with scholarly articles; but the same may not be true with museum materials, so this approach is not recommended.

FROM THE FLOOR: Since it’s about distributing scholarly information, I don’t see how it could be a problem. Why not just go ahead and make it public, and then if someone complains, deal with it in good faith?

YAMASHITA: I think priority should be given to

making available information about type specimens and materials used in scholarly articles.
HORII: One approach to releasing scholarly information would be to start with information giving an overview of the materials, and to release more detailed information in phases based on the situation.
While not all topics could be discussed as fully as desired, the panel members ended the session by making clear their resolve regarding data management.

--From attendees----------

(people affiliated with university libraries)
- This was a highly worthwhile seminar that turned out to be very educational. It was my first time to hear about Re∗poN, and I was grateful to learn so much in just four hours about the latest trends, issues, and news regarding open science and related topics.
- Even though not much was offered that could be reflected immediately in my work, it was stimulating to learn about global trends and what is in store for Japan.
- There was more conceptual material than I had expected. It was useful, though, for getting a grasp of the overall picture.

(university educator)
- I learned about many of the different issues involved in open data.

(university staff)
- It was helpful to learn that moves at the policy level are already under way toward the opening of science data.

(person in university, involved in academic journal editing)
- I learned about world trends concerning the sharing of research data. The seminar made me think about what I can do, as a journal editor, in response to these trends (Publish data journals? Call on authors to provide data to repositories?). My impression, though, is that data sharing is not yet being talked about much among researchers.

(person in corporation involved in university education)
- I listened with special interest to the discussions about moves at the policy level. This kind of overview is necessary when asking how libraries should respond to this major trend.

(person in corporation)
- I learned about the current state of Green Content and future prospects.

(person affiliated with libraries)
- The seminar made me aware of the kind of approach needed to promote institutional repositories, and of the need to think about handling research data.

---------Afterword----------

This is actually my first time to take part in SPARC Japan Seminar, and I'm at the stage of looking around saying, "Hmm, so this is what it's like." As for the topic at hand, we are hearing a lot from all sides about research data, but I came away with the strong feeling that the more you think about it, the more you realize the differences in the handling of data and scholarly articles. At the same time I feel more and more that this is a hugely important matter. One takeaway is that I am no longer sure articles will continue forever to be central to scholarly information.

Taro Misumi
(Chiba University Libraries)

We started planning this seminar on the theme of open data, but while we were making preparations there were many rapid developments among related institutions in Japan, which kept us busy day after day trying to keep up with them. I would be most pleased if we succeeded in sharing with everyone the joy of talking about future data management from a variety of standpoints.

Yasuyuki Minamiyama
(National Institute of Polar Research)

Though it was my first time not only to serve in the planning WG but to attend a SPARC Japan seminar, it was a stimulating experience in many ways. Since in this seminar the scope of openness was expanded to museum materials (!?), I wanted to work with Mr. Yamashita of Kyoto University, also a member of the Academic Repository Network, to inform as many people as possible about the current situation of museum collections and the challenges they face. For analog materials such as ancient manuscripts and specimens to be made available over the network, the efforts and cooperation of many people are necessary. I want to apologize for not doing a better job of moderating the panel discussion so that it held together more, but it is my sincere hope that there will be more opportunities in the future to bring together people from a variety of standpoints for frank and enjoyable discussions on open access to academic information.

Hiroshi Horii
(Academic Repository Network)

SPARC Japan　(International Scholarly Communication Initiative)

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(English Version)

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