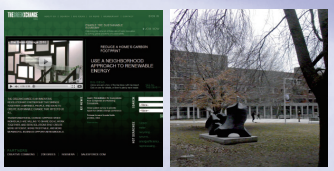
BioResource Now !

Issue Number 6 June 2010



Hot News from Abroad〈NO.31〉

Intellectual Property Unit,
National Institute of Genetics
Mutsuaki Suzuki, Director

Science Commons - Promoting Sharing of Research Achievements through the Web - <II>

※This is a sequel to the article introduced in the May issue.

4. Copyrights in Academia

- Open access to articles published in academic journals -

Open access to academic articles and their data is necessary for the development of a worldwide access environment to research data; however, this access is actually limited, thus making this a critical issue. In order to resolve this issue, Science Commons supports the self-archives of researchers at academic institutions, employs Creative Commons licenses for scientific journals, and assists in policy making at universities.

Academic researchers develop an open-access environment by posting (self-archiving) their articles that were published in academic journals on their own websites. Although most academic journals permit the self-archiving of journal articles, researchers find it difficult to understand how to negotiate with publishers, and thus, Science Commons developed a web-based program (Scholar' s Copyright Addendum Engine, SCAE) that appends the terms which permit self-archiving to the copyright transfer agreement submitted to the publishers. As a result, academic researchers, authors of the articles, can easily negotiate with publishers regarding the right to distribute their research achievements through self-archiving of the articles. This addendum engine provides an easy-to-use interface. By simply selecting and typing the required items, researchers can create an addendum to retain rights over their work. The articles will then be subjected to free access on the Internet after a certain period of time. Currently, there are approximately 3,000 accesses per month.

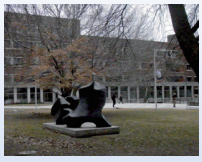


Photo : Building of Science Commons at MIT and the open space out front

In addition, several journals have already been published under the open-access priciple and have employed "Attribution License," one of the Creative Commons' licenses (http://creativecommons.org/licenses/by/3.0/).

This license indicates that the articles are freely shared and modified under the indication of attribution. Currently, academic journals that are published under this license condition include Public Library of Science (PLOS), Hindawi, and BioMed Central.

Figure: PLOS Website

In addition, Science Commons drafted several guides for an open-access environment in collaboration with the Scholarly Publishing and Academic Resources Coalition (SPARC), an international alliance of academic and research libraries. For example, Science Commons published "Open Doors and Open Minds," a white paper regarding an open-access environment for authors at academic institutions. This is a guide for authorities who would like to develop an open-access environment at the institution level. The public access policy of Harvard University is introduced in this guide. This policy provides universities with a license that allows them to non-profitably distribute articles that are deposited to a repository, a digital library of journals. In addition, the guide also describes action plans to realize an actual open-access environment and model contracts that permit open access between publishers and universities.

Moreover, NIH defined a policy wherein researchers are obliged to submit a final draft of their manuscripts to PubMed within 12 months from journal publication in order to receive research funding. In response to this policy, Science Commons drafted a guide that describes copyright issues and correspondences regarding adherence to the public access policies defined by NIH. Through these activities, Science Commons supports universities in implementing open-access policies.

Moreover, in the NeuroCommons project, Science Commons uses OWL*1 and RDF*2 to construct semantic websites and aims to develop an open-source knowledge administration system by text mining and natural language processing.

5. Patent Strategy

- Exception of academic usage, non-exclusive patent license -

As a strategy to smoothly propagate patents and accelerate open innovation, it is firstly necessary to permit academic researchers, who are in the upstream of research communities, to use patents for nonprofit research even if the patents belong to corporations. Second, it is effective to draft patent portfolios for public licenses so that the patent holders can allow anyone to access the patents and be licensed. The license conditions have to be simple enough to finalize the contracts without further negotiation.

As the first project regarding patent licenses, the GreenXchange (GX) project was initiated. Foundation partners of GX include Nike, Best Buy (appliance store), Yahoo!, and Mec, and currently, 10 groups are participating in the project. Creative Commons develops legal tools as a consultant of the GX project and aims to establish efficient access to patents and promote consistent innovations. The GX project was first introduced in 2009 at the Davos Forum (hosted by the World Economic Forum) in Switzerland. At the time, Science Commons developed legal tools and presented a report on the ideas of non-assertion of the patents used in academic researches and a non-exclusive patent license that is suitable for drafting a patent portfolio.

Figure : GreenXchange (http://greenxchange.force.com/)

*1 OWL: Data representation language to exchange data through ontology on the Web

*2 RDF: Resource Description Framework An integrated framework to represent resources on the Web

↳To the next page

6. Conclusion

I introduced the activities of Science Commons regarding research resources, data, and academic copyrights as research achievements and analysis of present state, development tools, and activity status pertaining to patents. In conclusion, the following are imperative to the realization of an open-access environment.

1) Standard MTA or NO-MTA should be applied to research resources.
2) Public domains or CC0 should be applied to data.
3) Open-access policy should be formulated to handle academic copyrights.
4) Public license portfolios that exclude academic research should be applied to patent licenses.

7. Acknowledgement

We place great expectations in the future activities of Science Commons and also pay attention to the activities regarding the openness of academic research in Japan. Finally, we sincerely appreciate Drs. Thinh Nguyen, Alan Ruttenberg, and Jonathan Rees at Science Commons for guiding us during our visit. Moreover, we are also grateful to Dr. Koichi Sumikura, associate professor, National Graduate Institute for Policy Studies, for his immense support during our visit.■

Photo :
Dr. Thinh Nguyen, an interviewee at our visit

The special topic on resources in the next month's issue will be "21st International Conference on Arabidopsis Research" .

Asynchronous Tracking Code in Google Analytics

Ongoing Column [No. 51] 10 min.

It is assumed that many people use Google Analytics for an access analysis of websites. Since December 2009, a new tracking code is now available in Google Analytics (announced in the Japanese edition of the public blog of Google Analytics).
The newly available code is called asynchronous tracking code, and thus, three tracking codes are now available in Google Analytics.

Table 1: List of Tracking Codes

Starting Date of Service	Starting Date of Service
November 16, 2005	urchin.js tracking code
December 13, 2007	ga.js tracking code
December 7, 2009	asynchronous tracking code

What are the differences between "asynchronous tracking code" and "ga.js tracking code" ? Although there is no difference regarding the information that can be obtained through these two tracking codes, the location of the tracking code differs. The ga.js tracking code should be located just before the closing </body> tag, whereas the asynchronous tracking code should be located just before the closing </head> tag. The change in the location of the code has the following benefits.

- The loading time of a webpage will be shortened, since the webpage can be loaded even if the loading of other JavaScript codes is still incomplete.
- Even if users exit the webpage before the loading of the website is completed, the data can accurately be collected.

Follow the steps below to migrate from the "ga.js" tracking code to the asynchronous tracking code. However, if you have customized your tracking codes, you need to add your customizations back in using the asynchronous syntax.

1 Remove any existing ga.js tracking code from your website. Data might not be collected accurately if you use both tracking codes together.

Fig. 1: Example of ga.js tracking code

```
<script type="text/javascript">
    var gaJsHost = (("https:" == document.location.protocol)
                    ? "https://ssl." : "http://www.");
    document.write(unescape("%3Cscript src='"
        + gaJsHost + "google-analytics.com/ga.js' type='text/javascript'%3E%3C/script%3E"));
</script>
<script type="text/javascript">
    var pageTracker = _gat._getTracker("UA-XXXXXX-X");
    pageTracker._initData();
    pageTracker._trackPageview();
</script>
```

2 Paste the asynchronous tracking code immediately before the closing </head> tag.

```
<script type="text/javascript">
    var _gaq = _gaq || [];
    _gaq.push(['_setAccount', 'UA-XXXXXX-X']);
    _gaq.push(['_trackPageview']);

    (function() {
        var ga = document.createElement('script');
        ga.type = 'text/javascript'; ga.async = true;
        ga.src = ('https:' == document.location.protocol
                  ? 'https://ssl' : 'http://www') + '.google-analytics.com/ga.js';
        var s = document.getElementsByTagName('script')[0]; s.parentNode.insertBefore(ga, s);
    })();
</script>
```

Changing tracking codes in this manner realizes a more accurate access analysis. However, this is a burdensome task, and thus, you should consider the cost-effectiveness before you migrate your codes.sferring codes.

(Gaku Kimura)

Announcements

(Details are available at http://www.nbrp.jp/)

The 4th International Biocuration Conference will be organized

Date: October 11–14, 2010
The conference will be held in Odaiba, Japan, this year.
For details, please visit http://hinv.jp/biocuration2010/.

The results of the project selection for the "Genome information consolidation program" (2010.4 - 2011.3) and "Fundamental technology consolidation program" (2010.4 - 2012.3) of NBRP in the fiscal year 2010 have been announced!

Download the PDF version of this newsletter at
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Editor's Note

The CC0 licensing of the data and open access to journal articles are useful systems for us database developers and administrators in order to rapidly and precisely obtain new information. At the same time, we are also on the side of providers of databases that are utilized by users and thus able to understand the situation of people confronted with difficulties in the current changing situation. We sincerely hope that the activities of Science Commons come to fruition and that ideal data sharing frameworks are soon propagated throughout the world. (Y.Y.)

"translated by ASL translation service and proofread by Sharoh Yip"