

**DEPARTMENT OF HEALTH AND HUMAN SERVICES  
NATIONAL INSTITUTES OF HEALTH  
NATIONAL LIBRARY OF MEDICINE  
NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION  
PUBMED CENTRAL NATIONAL ADVISORY COMMITTEE**

**Function of the PubMed Central National Advisory Committee**

Since the mission of NIH is to conduct and support medical research and to disseminate the results of that research widely to the public and the scientific community, it will make use of electronic publishing technology to fulfill this role by establishing and maintaining PubMed Central. This new service is a Web-based repository, housed at the NCBI that will archive, organize, and distribute peer-reviewed reports from journals in the life sciences, as well as reports that have been screened but not formally peer reviewed. The Committee shall advise the Director, NIH, the Director, NLM, and the Director, NCBI, concerning the content and operation of the PubMed Central repository. Specifically, it is charged to establish criteria to certify groups submitting materials to the system, monitoring the operation of the system, and ensuring that PubMed Central evolves and remains responsive to the needs of researchers, publishers, librarians and the general public.

**Summary Minutes of Meeting – April 28, 2005**

The meeting of the PubMed Central National Advisory Committee was convened on April 28, 2005 in the Board Room of the National Library of Medicine (NLM), Bethesda, Maryland. The meeting was open to the public from 9:30 a.m. to 2:50 p.m. Mr. James Williams presided as Chair.

**Members Present**

Anthony Delamonthe, M.D., British Medical Journal  
Michael Eisen, Ph.D., University of California, Berkeley  
Heather Joseph, M.A., BioOne  
Samuel Kaplan, Ph.D., Houston Medical School  
Robert Kiley, M.S.C., Wellcome Trust  
Debra Lappin, J.D., Princeton Partners Ltd.  
Bob Roehr, B.A., Self-Employed  
Mary Ryan, MLS, University of Arkansas Medical Sciences  
Anthony So, M.D., Duke University  
Ajit Varki, M.D., University of California, San Diego  
James Williams, M.S., University of Colorado at Boulder  
David J. Lipman, M.D., Director, National Center for Biotechnology Information, NLM,  
NIH, and PubMed Central National Advisory Committee Executive Secretary

**NLM Staff Present**

Jeff Beck, IEB, NCBI

Dennis Benson, Branch Chief, IRB, NCBI  
Jane Davenport, IEB, NCBI  
Mark Desierto, IEB, NCBI  
Martha Fishel, Public Services Division, NLM  
Marla Fogelman, IEB, NCBI  
Demian Hess, IEB, NCBI  
Betsy Humphreys, Deputy Director, NLM  
Laura Kelly, IEB, NCBI  
Christopher Kelly, IEB, NCBI  
Andrei Kolotev, IEB, NCBI  
Sheldon Kotzin, Chief, Bibliographic Services Division, NLM  
Sergey Krasnov, IEB, NCBI  
Donald A.B. Lindberg, Director, NLM  
Adeline Manohar, IEB, NCBI  
Carol Myers, IEB, NCBI  
James Ostell, Ph.D., Branch Chief, IEB, NCBI  
Kristine Scannell, Public Services Division, NLM  
Ed Sequeira, IEB, NCBI

### **Visitors Present**

Laura Brockway, Federation of American Societies for Experimental Biology  
Emilie David, American Association for the Advancement of Science  
Norman Frankel, American Medical Association  
John Long, American Society of Plant Biologists  
Diane Sullenberg, Proceedings of the National Academy of Sciences of the United States  
of America  
Nancy Winchester, American Society of Plant Biologists

### **I. Call to Order and Opening Remarks**

The meeting was called to order at 9:32 a.m. Mr. Williams welcomed members of the PubMed Central National Advisory Committee. Committee members were introduced and new members Robert Kiley, Mary Ryan, and Anthony So were welcomed. The Committee officially adopted the minutes from the November 2004 meeting. The date of October 20, 2005 was confirmed for the next meeting and a tentative date of April 26, 2006 was set for the following meeting.

Mr. Williams requested an update on the 2006 NLM budget. Betsy Humphreys reported that the budget process is still in the early phase but, as with the rest of NIH, there is little likelihood of any significant increase compared to 2005. She noted, however, that funding has been set aside for the NIH public access project. Mr. Williams asked about the inflation rate for journal subscriptions. Ms. Humphreys answered that the rate is around 10%, within the normal range of 9-15%.

### **II. Free Access Limits for the BMJ Group Journals**

Mr. Sequeira apprised the group on an ongoing discussion between PMC and the BMJ Publishing Group (BMJPG). In April 2003, NLM and BMJPG agreed in principle to add

the 20 BMJPG Specialist journals to PMC and the back issue scanning project. The agreement included a 3-year delay on free access to all Specialist journal content, which was within the limits of PMC's policy at the time. However, because of a BMJPG's lawyer's concerns about certain provisions, a formal agreement that was acceptable to both parties did not materialize until October 2004. In the meantime, the PMC committee had decided, in May 2004, that a practical maximum embargo period for research papers should be two years. PMC is now asking the committee to accept the 3-year embargo period that was agreed to with BMJPG before the current two-year limit was established.

Dr. Kaplan asked what the outcome would be if the committee does not allow the three year period. Mr. Sequeira answered that the journals will not participate. It was also asked if other potential publishers would ask for the same. Dr. Lipman stated that the two-year rule will hold for future participants, only the BMJ journals will be grandfathered. In response to a question from Mr. Kiley, it was said that all journal content will be available after three years for these journals. Mr. Roehr suggested that the issue be revisited in the future in hopes of harmonizing these journals with the access terms of other publications in PMC.

The motion to grandfather the terms of the BMJ contract was made by Mr. Williams, seconded by Ms. Lappin, and unanimously passed.

The committee also recommended that PMC staff should try to harmonize the participation terms of all the journals in PMC so that there is a uniform access policy.

### **III. Updating the Standards by which Journals Qualify for PMC**

Dr. Lipman reviewed the history and goals of PMC. The original criteria to qualify a journal for PMC were set to encourage wide participation and the formation of new journals. PMC has two concerns at this point with current criteria: journals with questionable quality and those producing small amounts of new content. Due to these concerns PMC is considering a more effective process to set standards for journal qualification.

PMC proposed a process that would involve a streamlined version of NLM's Literature Selection Technical Review Committee (LSTRC) selection process for journal inclusion in Medline. A journal would have to provide details of its editorial board and peer review process, as well as at least 10 original or review articles that have been published in the preceding 12 months or are scheduled for publication in the near future. The LSTRC group would evaluate the scientific merit of the articles and the quality of editorial control and accept or reject the journal for PMC. Reviews would normally be completed within three weeks.

Dr. Eisen asked for clarification on what degree of quality the committee is looking for. He expressed concern that the new process could erect a barrier for journals that could be beneficial to the public and PMC. Mr. Kotzin stated that for LSTRC the main criterion is quality which includes originality, accuracy, timeliness, and importance of material. LSTRC also examines the editorial process such as the composition of the editorial

board, editor-in-chief, manuscript to publication time, and other ethical issues. Dr. Lipman mentioned that the number of new journals who have recently requested to join PMC is small and most of them have been accepted. After some comments about the quantity of articles in particular journals, Dr. Eisen remarked that the issue of quality should be separate from the issue of workload and yield of articles. Ms. Lappin agreed and also raised the issue of public trust in PMC providing credible content. Ms. Humphreys said that the proposed quality standards could be more clearly defined.

Dr. Kaplan stated that a modest quality filter could be an advantage to drawing new publishers. Ms. Joseph agreed that raising the bar overall is good for PMC and open access journals but the potential downside could be the inhibition of open access journal creation. Other members agreed that quality standards are important for PMC. Mr. Roehr stated that as an archive, PMC should include all materials and that technical issues should be solved.

This subject will be revisited after PMC staff provide more details on the proposed quality standards and review process.

#### ***Break 10:55-11:05***

Dr. Eisen made a motion for implementing interim quality standards for new journals in PMC based on review by an external board. While the PMC staff is assembling the additional information requested by the committee, any new journals that apply to PMC should be reviewed by LSTRC. The motion carried with one abstention.

#### **IV. Remarks by NLM Director**

Dr. Lindberg thanked the group for their work and advice on PMC. He reported on the establishment of a working group under the NLM Board of Regents that has been charged with providing input into the implementation process and evaluation of meeting the goals of the NIH Public Access policy. Goals of the policy are to establish an archive, provide access to the research, and advance science by enabling integration of materials and the NIH research portfolio. Dr. Lindberg read names of nominees for the working group who represent a broad range of disciplines such as libraries, universities, science communities, public interest, and publishing.

Dr. Lindberg also reported on NLM's ClinicalTrials.gov database. The database has grown from 2,000 to 13,000 entries since its inception. The International Committee of Journal Editors recently enacted a policy that trials must be registered in a public registry before results will be published by the journals. International trials are being accepted into ClinicalTrials.gov and currently trials from New Zealand and Australia have been entered. For international submissions, a national organization will need to review the description of the trial.

Dr. Lindberg next spoke about interactive publications that would provide additional information such as graphics and visuals to accompany an online article. NLM is experimenting with the National Center for Health Statistics to make datasets and

statistics interactive and available to the public. Ms. Lappin commented that this project highlights the importance of many types of information being in the public domain. She mentioned that another important project is the new PubChem database which is being challenged by the American Chemical Society and asked Dr. Lindberg to comment. Dr. Lindberg mentioned that the NIH RoadMap is an important initiative with many projects, and one which received the highest ranking is Molecular Libraries and PubChem. This initiative has unanimous support from the NIH leadership.

### ***Lunch 12:00-12:45***

Dr. Lipman and Jeff Beck provided an update on PMC3, the latest PMC system, to integrate data formats for all information and articles in PMC to the NLM DTD. At this time 95% of the data is converted. Migration is being done from original source files to the new format. Many groups are moving to the NLM DTD for their content.

By request, Mr. Kiley reported on access policies in the United Kingdom. He expects that Wellcome Trust grant holders will be required to deposit the final peer reviewed copy of their manuscript in PMC or a European PMC, once established, within six months of publication. In December, a UK PMC was agreed upon with Wellcome, major life science research funders and charities, and the NHS, the UK's department of health. The research council, RCUK, is establishing a policy on public access which is expected to mandate awardees to deposit research into either an institutional or subject-based repository. Wellcome is inviting organizations to develop a service on behalf of the UK life science community.

### **V. Update on NIH Public Access Policy**

Dr. Lipman reminded the committee that the NIH public access policy was announced in February encouraging grant holders to submit accepted author manuscripts to PMC and specify a release as soon as possible and within 12 months of the final publication date. Authors are to inform the journal of their actions and the journal can provide a copy-edited version in substitution for the manuscript. PMC is ready for submissions on Monday, May 2. The degree of participation is hard to project but Congress is interested in participation rates. It was suggested by committee members that because the policy is voluntary, initial participation may be low.

Dr. So asked if guidance can be provided to modify copyright transfer agreements. NIH has provided a paragraph as an example for authors. Dr. Lipman added that NIH and PMC would like the author manuscript as soon as the paper is accepted to avoid delays in the correct version. Ms. Ryan asked about a central location for journal policies. Dr. Lipman replied that NIH is essentially asking the grantees to recognize their power as the copyright holder and take the initiative to discuss the issue with the publishers. Dr. Kaplan mentioned that ASM has a modified copyright agreement for these cases and plans to submit all manuscripts for the authors.

### *Manuscript Submission System*

Dr. Ostell provided an overview of the author manuscript submission system. The chain of events will include a manuscript upload to the submission system which will be automatically converted into PDF format and presented to the submitter for approval. If the submitter is not the PI, an email will be sent to the PI who will also have to approve the submission and specify a release date. After approval, the submitted files will be converted to XML and go through a vendor quality check. This version will be sent to the author for final signoff. From the final version, a publication check in PubMed will validate the article against the abstract information received from publishers, then it will be loaded to PMC under embargo. The article will be released based on the release date specified by the author.

There is no need to submit manuscripts for PMC journal articles. In these cases, the grant number will be tracked automatically for grants reporting purposes. Laura Brockway, FASEB, asked if all authors need to sign off. Only the PI will be required to approve the manuscript but all authors can be entered if desired. Only one person is needed to sign off on the final version.

### *Public Access Manuscripts in PMC*

Dr. Ostell showed an example of an author manuscript as it will appear in PMC. Details include notation of the author manuscript, deposition date, publication date and location, watermark along the article, and errata. The default version of the article will be the publisher version if available, and a link will be made to the author manuscript.

Mr. Kiley asked if a PDF will be marked up twice if both the author and publisher submit one. Dr. Lipman replied that PMC would like to avoid duplicate effort. Mr. Roehr asked about releasing an author manuscript earlier than the PMC journal releases articles. Dr. Lipman answered that the manuscript will be released according to the date specified by the author, after final publication of the article.

## **VI. Portable PMC and Distribution of Content to Collaborating Archives**

Dr. Ostell discussed Portable PubMed Central (pPMC), which can be used to build a local mirror of PMC content that will be updated daily from NCBI. pPMC will provide other international sites with capabilities for archiving, searching through NCBI E-Utililites, and rendering of PMC XML into HTML for presentation from the local database. pPMC is a first step toward collaborative archiving that may eventually be a distributed international effort. Technical support for pPMC installations will be provided by Microsoft.

Dr. Ostell presented an illustration of pPMC modules. He also provided views of browsing by journal and appearance of articles. Customized information will appear at the bottom of each article stating PMC is a service of the local archive's institute and NCBI. The system will soon be tested at some sites. The Wellcome Trust has adopted it for the archive of their grant holders and there is also interest by Italy and Japan. Dr. Eisen asked who can get this software and how. Dr. Ostell answered that the software can be given to anyone but infrastructure is needed for the system to work. He added that

content distribution is based on PMC publisher agreements. Dr. So asked if another organization could develop a module that could be used with the software or get the software for their use. Dr. Ostell replied that all NCBI software is public domain and anyone is free to use it as they wish.

### **VIII. Closing remarks**

Dr. Kaplan suggested development of a tool that would retrieve a piece of an article, such as tables and figures, for printing rather than downloading an entire article. Committee members agreed that such a tool would be useful.

The committee is highly interested to see the public access policy succeed in producing a timely, comprehensive archive of NIH research. Participation information will be shared at the next committee meeting. The committee commended Dr. Lipman and the NCBI staff on work well done.

### **IX. Adjournment**

The PubMed Central National Advisory Committee adjourned the public meeting at 2:47 p.m.

### **CERTIFICATION**

I hereby certify that the foregoing minutes are accurate and complete.

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(Date)  
James Williams, Chair  
PubMed Central National Advisory Committee

\_\_\_\_\_  
(Date)  
David J. Lipman, M.D., Director,  
National Center for Biotechnology  
Information, NLM