From the Editor's Desk

Janice Honeyman-Buck

Published online: 7 January 2012
© Society for Imaging Informatics in Medicine 2011

In February 2003, the National Institutes of Health (NIH) published its Final NIH Statement on Sharing Research Data in which it states its support for the concept of data sharing as essential for expedited translation of research results to improve human health [1]. The NIH statement included the policy that applicants seeking more than US \$500,000 or more in direct costs in any year of a project include a plan for sharing their data or a reason for not sharing them. In January 2011, the National Science Foundation (NSF) indicated that proposals must include a Data Management Plan that describes how researchers will conform to NSF policies on the dissemination and sharing of research results that include primary data, samples, physical collections, and other supported materials created or gathered in the course of work funded by NSF grants [2]. In November 2011, the Office of Science and Technology Policy issued a request for information seeking insight from “non-Federal stakeholders, including the public, universities, nonprofit and for profit publishers, libraries, federally funded and non-federally funded research scientists and other organizations and institutions with an interest in long-term stewardship and improved public access to the results of federally funded research” and specifically seeking public comments on several issues related to the preservation, discoverability, and access to digital data.

The Editors Forum for editors of radiology-related journals have made the commitment to promote the concept of sharing entire DICOM data sets used in all published journal articles to encourage translational research. In general, there is a

consensus that providing data to share with other researchers is important for the continuing scientific process.

While most researchers may be willing to share their image data, they are faced with the challenges of locating a persistent and easily accessible data storage and sharing repository and the technical challenges of de-identifying metadata to conform with the Health Insurance Portability and Accountability Act (HIPAA) rules for privacy and security. In the issue of data storage, it is unrealistic to expect a researcher to store, curate, and distribute data forever. The Radiological Society of North America took the lead in creating the Medical Imaging Resource Center project to create a distributed library of medical information, accessible to the imaging community, capable of storing imaging datasets for research and clinical trials. The National Institutes of Health and the National Cancer Institute have created large imaging repositories for data sharing. These two examples and other repositories are now available for the use of researchers and have essentially removed one of the barriers to data sharing.

The second challenge for many researchers is the difficulty in completely de-identifying image data. They are concerned about inadvertently releasing Private Health Information (PHI) embedded in the metadata associated with DICOM image sets.

The article included in this month's issue of the *Journal of Digital imaging*, “Image Data Sharing for Biomedical Research-Meeting HIPAA Requirements for De-identification” by Freymann, Kirby, Perry, Clunie, and Jaffe, while seemingly focused on technical aspects of de-identifying PHI in clinical imaging, has greater science significance since it addresses one of the most commonly cited barriers for researchers not sharing their clinical images arising from translational clinical research. The method described in this article, if widely accepted and emulated, could provide a significant advance by

J. Honeyman-Buck (✉)
508 Bramble Fern Ave,
Deland, FL 32720, USA
e-mail: jhoneyman@siimweb.org

encouraging imaging researchers willing to data-share by introducing them to the tools that will allow them to confidently avoid inadvertent PHI exposure and HIPAA violation. The method described in the article not only removes or alters public and private DICOM tags while preserving the tags valuable to the greater image processing research community, but deals with the problem of information burned into the image itself.

This issue also debuts a new four article series by Bruce Reiner and Elizabeth Krupinski on fatigue in practice of medical imaging. As radiologists experience increased case loads combined with increasingly complex imaging protocols and larger numbers of images per study, fatigue is becoming more common and could lead to medical error.

This series discusses the problem and suggests methods to measure and to educate practicing radiologists on the problem with potential solutions.

These important articles are published online as freely available on springerlink.com for free access for all readers.

References

1. Final NIH Statement on Sharing Research Data, NOT-OD-03-032 (National Institutes of Health, 2003); accessed at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-03-032.html> on December 9, 2011
2. Notices, Federal Register; Vol 76, no 214., Nov. 2011