

Dangerous copyright proposals hit medical community hard

If one were to ask the average physician to name imminent policy reforms relevant to the medical profession, copyright law is not among those topics most likely to leap to mind. This may soon change: the Canadian government is contemplating dramatic copyright reforms that could have a detrimental impact on medical research and education. If the medical community fails to speak up on these issues, it will do so at its own peril.

Patent and copyright law share the same basic objective: to balance the interests of inventors and creators with those of the general public. In the case of patents, inventors are typically granted a limited 20-year monopoly over their invention. In return, the public receives immediate access to a full description of the invention and the right to use the patent, without condition, on its expiry.

Copyright features a similar balance. Authors obtain copyright in their work automatically without registration and benefit from a basket of time-limited exclusive rights, including the right to reproduce and translate their work. The public benefits from a series of "user rights" that allow for the copying of portions of the work for research or private study without prior permission as well as unfettered access once copyright in the work expires. (This is known as entering the public domain.)

Researchers can be forgiven if they occasionally believe that the balance is skewed heavily toward rights holders. One such example concerns Myriad Genetics, a Utah-based company that holds patents on diagnostic tests and treatments involving breast cancer genes. The company has entered into licences with medical schools, universities and hospitals, giving them the right to use their tests in re-

search on breast cancer. These licences have faced growing criticism, however, as medical school researchers are forced to abandon their work because of licensing terms that exclude clinical research by restricting research to a laboratory setting.¹

Copyright law is slated to undergo changes in Canada that will provide rights holders with similar strangleholds over their content, to the detriment of the medical research community.

One of the most troubling copyright proposals concerns technological protection measures (TPMs), which are used by owners of online databases and other digital content to establish a layer of technical protection that prevents users from making unauthorized copies of their work. For example, popular medical texts designed for handheld electronic devices

taured technological limitations that prevented users from "cutting and pasting" even a single sentence.²)

The legislative proposal, which comes as part of a move to ratify 2 controversial international copyright treaties, adds to the dangers associated with TPMs by providing an additional layer of protection that prohibits attempts to circumvent or defeat the technological protection measure. In the United States, this layer of protection has criminalized attempts to access research data protected by a TPM, even if the intended use is itself lawful under copyright law. In their zeal to enact similar legislation in Canada, policy-makers may use the US approach as their model.

Consider the potential impact on genetic research. Researchers seeking to obtain ac-

Rather than adopting an approach that facilitates the use of the Internet, the government is moving toward a model that will force schools to pay to use Internet materials

such as the Palm contain TPMs that restrict use of the electronic books in ways not found in the paper-based versions of the same texts.

Unfortunately, TPMs are blunt instruments that block both the full-scale unauthorized copying that is expressly denied by copyright law and limited copying, such as copying short passages for research purposes. (For example, CBS News recently released a 234-page report on the use of unverified documents in relation to a report on President Bush's military service. Critics soon noticed that the document fea-

cess to proprietary genetic databases could be forced to negotiate a licence from the database owner, despite user rights that would otherwise grant the right to access and use selected portions of the database content without prior approval.

The proposed copyright reforms also pose a significant threat to the dissemination of research results, particularly research with a security component.

In the United States, the enactment of the Digital Millennium Copyright Act (DMCA) has led directly to such a chill. For example, several years ago a Princeton researcher sought to

release an important study on encryption. When he publicly disclosed his plans, he was served with a warning that he faced potential legal liability under the DMCA if he publicly disclosed his findings.³ Similarly, in 2001, a Russian software programmer was arrested and spent the summer in a California jail after highlighting encryption weaknesses in an Adobe software product at a public conference.³

These cases sent a wave of fear through the research community, not only leading foreign researchers to avoid traveling to the United States, but also leading cyber-security czar Richard Clarke to acknowledge that “a lot of people didn’t realize that [the DMCA] would have this potential chilling effect on vulnerability research.”⁴ For researchers of all specialties, the restrictive potential of DMCA-style legislation is a cause for concern.

The proposals would also harm the use of the Internet as an educational tool within Canada’s medical schools. The federal government’s copyright proposals contemplate reversing the decade-old policy of avoiding Internet licensing by creating a licensing system for Internet content that would create new restrictions to accessing online content. Although the proposals began with the laudable goal of increasing access while

providing creators with appropriate compensation, by proposing a very narrow definition of what can be accessed without compensation, the plan would effectively force millions of Canadian students to pay for access to content that is otherwise publicly available.

Rather than adopting an approach that facilitates the use of the Internet, the government is moving toward a model that will force schools to pay to use Internet materials — contrary to the expectations of many creators. Canadian medical schools, which are struggling with 20th-century budgets to provide a 21st-century education, should call on the federal government to reject the proposal and instead adopt a balanced copyright approach that encourages the use of the Internet in Canadian schools.

One possibility would be the establishment of a limited educational-user right to publicly available work on the Internet. In keeping with long-standing and widely accepted practices on the Internet, publicly available work would include materials that are neither technologically nor password protected — i.e., information that the author or publisher would want to make widely available, such as the *CMAJ* archive.

Although the US Medical Library Association has been an active participant in that country’s

copyright reform process,⁵ the Canadian medical community has thus far been largely silent on Canadian copyright reform. Given the direct impact of these troubling proposals, it can no longer remain on the sidelines. The medical community has the opportunity to emerge as a positive force for change by actively supporting a uniquely Canadian vision of copyright that supports both creator compensation and facilitates, rather than hinders, research and education.

Michael Geist

Faculty of Law
University of Ottawa
Ottawa, Ont.

Michael Geist is the Canada Research Chair in Internet and E-commerce Law at the University of Ottawa. He is online at www.michaelgeist.ca. The views expressed here do not necessarily reflect those of the University of Ottawa.

References

1. Willson DJ, MacLeod SM. Patenting of genetic material: Are the benefits to society being realized? *CMAJ* 2002;167(3):259-62.
2. Zeller T Jr. CBS news draws ire of bloggers. *New York Times* 2005 Jan 17; Sect C:6(col 1).
3. Electronic Frontier Foundation. *Unintended consequences: five years under the DMCA*. Available: www.eff.org/IP/DMCA/unintended_consequences.php (accessed 2005 Mar. 9).
4. Bray H. Cyber chief speaks on data network security. *Boston Globe* 2002 Oct 17.
5. Medical Library Association. *Digital Millennium Copyright Act*. Available: www.mlanet.org/government/dmca/index.html (accessed 2005 Mar. 9).



**Online manuscript
submissions and
peer review**

NOW AVAILABLE AT CMAJ

<http://mc.manuscriptcentral.com/cmaj>