He Took His Notebook!

By the time a researcher is a post-Doc, the odds are pretty good that he or she has probably heard if not actually experienced an instance of an individual leaving a lab and taking his or her lab notebook along. For obvious reasons, this frequently causes a great deal of emotional upset in the lab—not because the research itself is of earth shattering importance but because the act raises the question of who really owns the data and who has the right to control its dissemination.

The standard answer in academic research is that the University owns the data and the research findings, but it is hard to convince an investigator of that when he or she is the one whose ideas generated and whose work produced that data. So, what usually happens is that months of back and forth communications go on, with the PI or the lab director trying to persuade the individual to return his or her lab notebook, even though the University will often allow the individual to make and keep a photocopy.

This kind of case always raises the following questions: Does the investigator have any right to the ideas he or she developed while working at the lab? What considerations should this person make if he tries to publish that data? How should such a situation be managed?

Expert Opinion

In his book *Scientific Integrity*, Francis Macrina notes that "Laboratory data books are the definitive sources of data and facts."^{1, p. 232} He also points out that:

- An investigator who is taking over an ongoing project will naturally look to the lab notebooks for definitive information on the experiments;
- The NIH can legally audit and examine data relevant to a grant it has awarded and might want to inspect the source material;
- Data notebooks can be crucial sources of information to patent examiners, while litigation involving patents might require the original data books for evidence.

There don't appear to be any regulations for maintaining or managing the contents of laboratory notebooks, so a great deal of variation can exist from lab to lab or institution to institution. This is unfortunate because if universal standards existed that were robustly enforced—such as requiring all investigators to update a master notebook maintained by the PI—the departure of a post-Doc such as described in this scenario might not be all that traumatic. As it is, however, the post-Doc's abrupt exit with his (and, let us assume, others') data might set the experiment or the entire research project back considerably, possibly irreversibly. Furthermore, if the post-Doc leaves for another country, recovering the data might be next to impossible.

While an investigator can insist that the data he generated in the lab is his by virtue of his labor,² such stubborn insistence does not make the claim true. To the extent that a grant is made to an institution by an external grantor like the NIH, the institution is the grantee, not its investigators. By virtue of their employment, the investigators' labors are purchased by the institution in return for which the investigators perform the work promised in the grant.³ Typically, the research will be carried out on the institution's premises with its technology, employees, and equipment—all of which underlines the fact, made explicit in the grant award documentation as well as in the original employment contract or letter of understanding between the institution and its investigators, that the institution owns the fruits of its investigators' labors. Usually, the only thing that will alter the institution's ownership of data or its intellectual property rights will be a 1) separate, legally enforceable contractual understanding with the investigators such that they retain some portion of the intellectual property interest, or 2) an institution might have a contractual understanding with a commercial grantor like a pharmaceutical company such that the grantor will own the data. In this case, however, let us assume that the investigator's abrupt

departure with his lab notebook and other research data is a violation of his contractual obligation to the institution and, therefore, minimally *represents a theft*. The question then becomes what is the institution's best course of action?

Certainly, the institution can sue the post-Doc, but if he has absconded with the materials to the other side of the world, waging a lawsuit might be more trouble than it's worth. We might turn the question around, however, and ask "What can the post-Doc do with these data?" Suppose he tries to publish them, but does not include any other investigators as authors even though he includes their findings in the paper. If he publishes a paper with himself as sole author, he will then be taking credit for certain work that is not his. This would constitute blatant misconduct, e.g., plagiarism, fraud, misrepresentation, etc. Alternatively, if he attempts to contact other investigators and involve them in writing the manuscript, they would be well advised to refuse co-operation until their institution is satisfied that its intellectual property rights to these data are honored.

If the post-Doc totally refuses to co-operate but secures employment with another research institution, the investigator's former PI or lab director might contact the investigator's new employer and explain the situation. This might induce the new employer to correct the situation by imposing pressure on the post-Doc to return the data. Alternatively, the threat of a well-publicized complaint against the investigator and the damage it might do to his career might make him think hard about the consequences of keeping the data. Of course, if the investigator's new employer is as morally vacuous as he is and values the data out of self-interest, that institution will similarly risk violating intellectual property rights and invite patient infringement litigation should it pursue research using the pilfered data.

Investigators at institutions must have a clear and explicit understanding of their contractual obligations and the ownership status of the work products they evolve. To the extent that an employer can show that a reasonable attempt was made to have employees gain a reasonable understanding of who owns what—for example, was the explanation conveyed in the investigator's native language?— the investigator's moral turpitude is all the more blatant and unjustified.

Ultimately, it is worth considering that the investigator might have his way about this, cause profound damage to the institution he left, and not suffer much, if at all, by way of penalty. Regardless of whether the investigator's intentions were to sabotage the lab or steal the data for his personal gain, or whether he just stubbornly believes that the data are his no matter what, the institution might decide that the fight to have the data returned isn't worth the effort. On the other hand, not prosecuting or failing to lodge a professional complaint about the investigator's conduct seems to condone it. Whether the investigator did or did not remain in the United States, the institution would be remiss if it didn't inform the research entity at which this investigator might secure future employment of his data theft. Alternatively, the institution might contact any professional organizations with which the investigator is involved or is a member and inform them of the incident.

Perhaps the best, although not foolproof, way to protect against something like this happening is for the PI to insist that the experiment's master log or master notebook is updated regularly and that all the investigators in the lab feel supported and respected. We do not know why this investigator left, but if his departure was motivated by vengeance or hatred, supportive and respectful leadership and an insistence on professionalism among the lab's staff might have prevented it.

References:

1. Macrina FL. *Scientific Integrity: An Introductory Text with Cases, 2nd Edition*. Washington, DC: ASM Press, 2000.

2. Resnick D. A pluralistic account of intellectual property. Journal of Business Ethics, 2003;46:319-335.

3. Shamoo AE, Resnick D. Shamoo AE, Resnik D. *Responsible Conduct of Research*. Oxford, UK: Oxford University Press, 2003:119-138.

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