For graduate students, it pays to **PAY ATTENTION TO PATENT RIGHTS**

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**UNTIL RECENTLY,** I would have described the lone patent that came out of my doctoral research as the most unloved of my graduate student labors.

Having spent my short career as a scientist entirely in the publish-or-perish world of academia, publications were the only currency that seemed to matter. That patent—for the development of some novel and medicinally relevant analogs of vitamin D—was never going to get me a postdoc, I thought. It was never going to get me a job. And it was definitely never going to make me any money.

As an occasional needling reminder of my tiny piece of intellectual property, every few years I would get some paperwork to sign from the Office of Technology Transfer at my alma mater, Johns Hopkins University. I remember signing the form that gave my rights away to the university for $1.00. A dollar I never received, I might add.

Then, last November, I got another e-mail from the tech transfer office asking me to verify my address. When I replied with my office address, I was told they’d need my home address because that’s where they’d be sending the tax forms for my royalties.

“Royalties?” I asked. “What royalties?”

I never received a reply. And the whole episode slipped my mind until I returned from my Christmas holiday to find what was obviously a check from Johns Hopkins among the accumulated mail. “This must be the royalty check,” I laughed. My husband and I decided to guess the amount before we opened it. He guessed 78 cents. Being a little more optimistic, I thought it would be closer to $25. We were both off. Way off.

It would not be polite to give a precise figure, but I will say that it wasn’t enough money to retire or to quit my job or to buy a new Mini Cooper. But it was more than the annual stipend I received as a graduate student. And that got me thinking about how ignorant I’d been about patents. What had I been signing all those years? What were my rights when it came to my graduate research?

R. Keith Baker, the senior director of licensing at Johns Hopkins’ Office of Technology Transfer, says that although the number of graduate students who are savvy about intellectual property is on the rise, most are as ignorant about patents as I was. “They’re more interested in getting through the program, getting their degree, and going on to the next step,” he says.

That’s not really much of a surprise, says Marc A. McKithen, chair of ACS’s Division of Chemistry & the Law and an intellectual property attorney with Milbank, Tweed, Hadley & McCloy. “In the academic setting, students and professors often do not learn about intellectual property rights until something has been invented,” he says. “Tech transfer officers sometimes have to drag professors kicking and screaming to patent their work.”

**INVENTORSHIP CAN BE** a sticky matter. “Inventorship is not the same thing as authorship on a paper,” Baker says. “Inventorship is a legal determination under U.S. patent law. It’s important to have the inventorship on the patent correct. If it’s not, the patent can be invalidated.”

“Anyone who did lab work on a project could be an author on a paper,” McKithen adds. To be considered an inventor, one has to have conceived some part of the invention. For example, he says, if a graduate student’s adviser tells her to make 10 compounds and how to make them, the student is not considered an inventor of those compounds, even if she does all the lab work. If she comes up with a new and nonobvious way to make the compounds, she’s a coinventor of the process. If she comes up with two other novel compounds, then she’s a coinventor of those compounds.

It’s important to hammer out one’s contribution to a project before the patent paperwork is in, McKithen says. “If you’re going to have any leverage, it’s while you’re filing the application. Once the assignment is signed, it’s going to be harder to get something back.”

Having said that, McKithen adds that “most graduate students are not going to invent something that’s going to be economically significant.” He advises students to familiarize themselves with their university’s intellectual property policy and “to focus on work at hand and look forward to becoming an inventor in the future.”