

Intellectual Property

Intellectual Property includes:

- Copyrights: A copyright protects the tangible expression of an idea, not the idea itself (e.g., a book, a research article, or a videotape).
- Patents: A patent protects the idea and gives the creator the right to exclude others from using the idea (e.g., a patent may be awarded to anyone who invents a new machine or a new way of manufacturing something, etc.). In order to receive the patent, the creator must disclose in detail how to make his invention work and its use.
- Trademarks: A trademark identifies and distinguishes an idea, written words, pictures, or products from those of competitors (e.g., the Coca Cola script name is a registered trademark that immediately identifies the product).
- Trade Secrets: A trade secret refers to information that is not publicly known, that produces economic benefit to the owner, and that the owner maintains as secret.

Who owns your “intellectual property”?

For these situations, what kind of intellectual property is involved and who owns it?

A professor gives an off-the-cuff lecture and you take notes.

A professor reads a passage from his book and you copy it exactly.

In the lecture you took notes on, he describes a recent patented invention of his.

For the University Policy, see

http://regents.umn.edu/sites/default/files/policies/Commercialization_IP.pdf

Authorship

To merit authorship, three things must usually be present (though different journals or fields may have specific guidelines). Generally:

1. All authors must make a significant contribution to research, such as conceptualization and design, collection of data, or analysis and/or interpretation of results.
2. All authors must contribute to drafting and/or revising important parts of the manuscript.
3. All authors must have final approval of the manuscript and accept responsibility for its integrity.

Consider the following situation. Who should be an author? Who should be acknowledged? Who does not merit formal recognition?

Bob Powell, a postdoctoral fellow in biochemistry, has just completed a manuscript detailing the results from the first project in which he has taken a leading role. The focus of his project has been to discern the ways in which humans metabolize sulfites, a class of chemicals commonly used to preserve wines and dried fruits. Although he had developed the rough outlines of the project on his own, he owes much to individuals both inside and outside his lab. The assistance he received from others includes the following:

- A colleague at another university, a toxicologist specializing in food additives, shared with Bob his previous work on the *in vivo* activity of sulfites, information that allowed Bob to choose the ideal animal model for the experiment—the Abyssinian field mouse.
- A friend of his, who happened to be a wildlife specialist, provided Bob with much advice on rearing and maintaining a colony of Abyssinian field mice such that he would have a stable pool of animal subjects.
- A highly experienced technician in the lab gave Bob advice on modifying an assay he had been using, which finally allowed him to measure successfully sulfite metabolites in mouse urine. This technician also assisted in writing up the methods section of the paper.
- The number of assays that Bob had to conduct was quite sizable and more than he could manage on his own, given other demands of the project. Thus, an undergraduate college student collected most of the urine samples and conducted the assays yielding the data.
- Finally, a senior researcher in a neighboring lab who took an interest in Bob's career offered to review the initial drafts of Bob's paper. By the end of the writing process, this researcher had helped Bob outline the paper, suggested a few additional experiments that strengthened the paper's conclusions, and made a number of editing changes in the penultimate draft that enhanced the paper's clarity.

Everyone who does 1,2,3 should be an author, and all authors should do 1,2,3, but not all authors are created equal. How is order of authorship decided?

From the Minnesota Daily, February 20, 2014

U returns rights to students

The University is now letting students keep the rights to products they make in class.

By Meghan Holden

Before Friday, University of Minnesota students didn't own the rights to the work they created in classes.

The University's Board of Regents approved the policy change at its monthly meeting in response to faculty and student requests over the years. University officials say they hope the change will promote entrepreneurship in science, technology, engineering, mathematics and business programs.

"The students actually benefit because they sort of get the fruits of their labor," said Brian Herman, University vice president for research.

The old policy required students to disclose their inventions to the Office for Technology Commercialization, and then the University would work with companies or investors interested in the product. Last year, students, faculty and staff reported more than 330 inventions to the OTC, according to the Office of the Vice President for Research website.

Now, students own the rights to their intellectual property and can market their own products or work with the University to sell them. The new process is more efficient and may empower students to create better products in their courses, OTC executive director Jay Schrankler said.

"It puts them in the driver's seat," he said.

With the updated policy, the University is mirroring how other Big Ten schools, including the University of Illinois, Penn State University and Purdue University, approach intellectual property.

Students and faculty across the University had pushed for updating the policy in recent years, Schrankler said. Now seemed like the perfect time, since the institution is offering more hands-on learning opportunities.

"We want to encourage our students to be entrepreneurial," he said.

Encouraging entrepreneurial spirit

The institutional policy change coincides with the University's recent addition of entrepreneurial-driven classes that focus on research, design and business programs.

This year, the Carlson School of Management, the College of Science and Engineering and the OTC partnered to create a new program, MIN-Corps, that aims to help CSE students and researchers learn how to market their ideas.

University students also promote their work in the Minnesota Cup, an annual business ideas competition launched in 2005.

Third-year MBA student Nathan Conner won the \$10,000 student division in the statewide competition last year with his invention, "Shedbed," a bed that collects shedding pet hair.

Conner, who took part in the MIN-Corps program last semester, said the new policy change will be great for students as they develop products at the University.

Herman said the University will continue investing in more entrepreneurial initiatives to attract students who want to learn in more interactive ways, and the policy change could be a high selling point.

"We see this as a way that we can track some really entrepreneurial students who like the idea of going to an innovative place that's really forward-thinking," Herman said.

U promotes intellectual property rights

A policy change allows students to own the rights to their inventions.

By Daily Editorial Board February 25, 2014

Not every college student can say that their higher education experience included the opportunity to design and market their own inventions. But at the University of Minnesota, students not only get to actively design and create products for class, but they now own the rights to their intellectual property, something the University possessed prior to last week.

The Minnesota Daily reported last week that the policy change came “in response to faculty and student requests over the years.” The University’s new policy is similar to how other Big Ten schools, including the University of Illinois, Penn State University and Purdue University, approach intellectual property. Before the change, students had to report their inventions to the Office for Technology Commercialization, and the University could market them at will to potential buyers.

Though it still may be beneficial for students to partner with the University in order to successfully market their inventions—largely because of the University’s resources and vast network—it’s appropriate that students now have the rights to their own work.

The University undoubtedly gains recognition and money from student work, so the new policy strikes a balance.

The policy change gives greater freedom to entrepreneurial programs, senior design programs and student research at the University. Students will now have a say in how and to whom their product is marketed.

Creeping corporate influence into higher education and research should not exploit the student work and creativity. This policy change is a step toward protecting the integrity of the University and its students.

Name: _____

We discussed some issues about authorship and intellectual property today.

What did you find particularly interesting or new to you?
