



University of Pittsburgh
Kenneth P. Dietrich School of Arts and Sciences
Department of Chemistry

1101 Chevron Science Center
Pittsburgh, Pennsylvania 15260
Tel: 412-624-8240
Fax: 412-624-8611
E-mail: curran@pitt.edu

Dennis P. Curran, Ph. D.
Bayer Professor and Distinguished Service Professor of Chemistry

White Paper on IP Ownership Issues and Policies at the University of Pittsburgh

To: The Chancellor's Policy Review Committee (Mark Redfern, Chair) and the University of Pittsburgh Community

By: Dennis P. Curran, Bayer Professor and Distinguished Service Professor of Chemistry, University of Pittsburgh; curran@pitt.edu, January 7, 2016.

Summary

The aim of this three-part white paper is to propose and justify a new policy of **scholar ownership** of IP for the University of Pittsburgh. Pitt's current policy is one of University ownership of all IP. This document differentiates between "nascent IP", for which scholar ownership is an academic right, and "commercializable IP", for which University ownership is often appropriate. The word "scholar" is not limited to faculty members; it means any University member involved in teaching or research.

IP ownership is the most important issue before the Chancellor's patent policy committee. This is because most other technology transfer policies will necessarily follow from IP ownership. The university's policy on consulting, for example, will follow from whether nascent IP generated during consulting engagements is owned by the scholar-consultant or by Pitt.

Part 1 summarizes the many problems with university ownership of nascent IP. Nascent IP is ideas; ownership is control. So universities that own nascent IP are in the idea-control business. This is wrong because scholars control their own ideas. Further, the university control mechanism based on "prompt disclosure" of all IP is impractical at best. Finally, university ownership of IP literally criminalizes the free flow of ideas and knowledge that is the core of the university system.

Part 2 summarizes the current IP ownership situation at Pitt—both where we are and how we got here. In a word, IP ownership at Pitt is a mess. The mess was initiated by a 2011 Supreme Court decision and subsequently compounded by unilateral actions by the administration. These actions disregarded ownership rights of Pitt scholars as articulated by the Court decision. Pitt's new IP ownership policy should be simple, flexible, fair, and consistent with Pitt's copyright policy. Most importantly, the new policy should be based on Pitt's core values as a University.

Part 3 is specific wording for a proposed new policy along with a justification for the policy. The proposed policy has scholar ownership of IP as the default but at the same time provides for university ownership on a flexible basis at the joint discretion of the scholars and the university.

PART 1. Problems with University Ownership of Nascent IP

University ownership of nascent IP is common, yet has fundamental problems that make it inconsistent with the university mission of creation and dissemination of knowledge. This is a short discussion of what IP is followed by an outline of problems that arise with broad University ownership of nascent IP.

Intellectual Property (IP) is a legal concept that can be difficult to apply in the real world. IP starts with an idea that is new, useful and not obvious. The next step may be experiments (either in the lab or the mind), which result in knowledge. Sometimes the knowledge is advanced to a working invention. Occasionally the invention is patented. And once in a while revenue results. The IP makes money. However, the IP itself starts with the idea and the resulting knowledge.

So IP is a continuum from an idea to a revenue stream. Ideas and knowledge can be owned, just like real property can be owned. IP ownership law is founded on an old principle of common law: new property is initially owned by its creators.

At research universities, ideas that are new, useful and not obvious are ubiquitous. Such ideas are IP. Most IP never advances far along the continuum towards revenue. A critical milestone is the time of invention disclosure. I call IP before an invention disclosure “nascent IP” and IP after an invention disclosure “commercializable IP”. Commercializable does not mean profitable; it simply means potentially attractive to the market either directly or after further development.

IP must be proprietary up to the point of patent filing. Prior to patenting, the continuum of nascent IP can be broken at any time by a public disclosure. This in no way cancels the idea, the knowledge, or any ramifications, of course. It just cancels the property; there is nothing to own.

University Ownership of IP: University ownership of *commercializable* IP is a sensible model that is today the norm in the US. Universities provide resources in the form of technology transfer offices, funding for patent filings, and so on. These resources can add value to IP.

In contrast, university ownership of *nascent* IP is entirely inappropriate for the following reasons:

1) Universities are not in the idea-ownership or knowledge-ownership business. There is a sense that IP and basic research are two different things, and that you can choose to do one or the other. By law, this is nonsense. Basic research is often IP; a scholar is often an inventor.

You can choose whether to pursue your ideas, whether to publish or patent the resulting knowledge, whether to commercialize, and so on. You cannot choose whether and which of your ideas are or are not IP. You cannot choose whether you are a scholar or an inventor. IP law chooses for you.

A university that owns nascent IP is in the business of owning ideas, owning knowledge. The concepts of idea-ownership and knowledge-ownership at universities sound repulsive because they are.

The vast majority of this new knowledge is not commercializable as IP. New knowledge is pursued for the sake of knowledge, not for the sake of money. IP law offers no difference between knowledge for the sake of knowledge and knowledge for the sake of downstream commercialization. The

difference only comes when a patent is filed. Now a defined piece of new knowledge is submitted for protection of ownership rights.

2) Ownership is control. If universities own ideas and knowledge (nascent IP), then they control it. This violates the long standing university principle of scholar control of ideas and knowledge. Ownership comes with vast legal rights. For example, universities could forbid or delay publication, could force scholars to file patents (even if the scholars prefer to put their knowledge into the public domain), could file patent applications without scholars knowledge or permission, and so on.

These and other expressly legal actions violate academic rights. In principle, universities could put in place policies to protect academic rights. In practice, such policies often do not exist. For example, *scholars have an unbridgeable right to decide the course of disclosure of their knowledge; they alone decide whether to publish or to seek patent protection.* At most institutions with university-ownership of IP policies, this right exists nowhere but in tradition.

The abridging of scholar rights at Pitt is not hypothetical. In 2013, the University implemented a restrictive Visitor policy that would have severely curtailed standard academic collaborations. This policy, justified by University ownership of nascent IP, was suspended when a diverse collection of scholars cried foul. In 2014, Pitt tried to force all faculty members to sign present assignments permanently transferring ownership of all nascent IP (past, present and future) from scholars to Pitt. This time the Faculty Senate forced a tactical retreat. In short, Pitt's administration has shown no compunction in recent years to act unilaterally to enforce what it sees as its rights, showing little regard for collateral damage in basic research and no regard for the rightful owners (scholars, see Part 2).

3) University control mechanisms for new IP are entirely impractical. To enforce their rights as owners, universities typically require prompt disclosure of all new inventions (IP). *This requirement is absurd in the extreme.* New IP is ideas that are new, useful and not-obvious. At Universities, such ideas are a dime a dozen. The prompt disclosure of every new idea is plainly fantasy.

In the real world, scholars file invention disclosures at their discretion. It is ludicrous to maintain, as most universities do, that a "prompt disclosure" system functions as written. The disclosure requirement notwithstanding, *the vast majority of new IP at all universities is never disclosed at all.* Most nascent IP is put directly into the public domain by its inventors.

4) University ownership impedes the free flow of ideas and knowledge by criminalizing departing scholars. This is a serious problem, best illustrated with an example. You are a graduate student in biology, interested in a career in academics. Your university has a policy that it owns your IP (you signed a present assignment). You have original ideas in synthetic biology, use them to apply for a job as assistant professor at Harvard, get the job, and start to work on your ideas. You are now a criminal. You stole IP rightfully owned by your PhD university.

Movement of scholars of all levels between institutions is standard practice. The resulting free flow of ideas and knowledge cannot be impeded by ownership of nascent IP. Departing scholars have every right to the ideas and associated knowledge that they created.

Conclusions: Many universities claim ownership of all or much IP from its creation. However, because this claim is both impractical and violates academic principles, universities discretely let their

scholars behave like owners from the point of creation of IP up to the point of disclosure. Universities, owning everything, reserve the right to claim ownership of whatever suits them whenever it suits them. This system is a sham. IP is owned by its creators. Scholars who behave like owners are owners.

The goal of the university is creation and dissemination of knowledge. To be sure, university ownership of commercializable IP is at times a potent tool to advance this goal. However, university ownership of all (or much) nascent IP is not the right vehicle to secure ownership of commercializable IP.

PART 2. IP Ownership at Pitt – Let’s Clean up the Mess

The 2011 Supreme Court decision in the case of *Stanford v. Roche* created a problem for many universities regarding IP ownership. At Pitt, this problem was compounded by subsequent unilateral actions by the administration. Part 2 provides a short summary of where we are and how we got here, then Part 3 recommends a policy of scholar ownership of nascent IP.

Because ideas are IP and IP is owned, critical aspects of many Pitt research programs—unpublished or undisclosed ideas or results—are property. But who owns this property? That is not always clear. And why is ownership important? That is very clear; ownership is important because ownership is control.

The longstanding Pitt policy on IP seems clear enough: (<https://www.cfo.pitt.edu/policies/policy/11/11-02-01.html>)

“The University *claims* ownership and control of the worldwide patent and intellectual property rights which result from activities of its faculty, staff, and students.”

However, the University’s “claim” was in effect voided by a 2011 Supreme Court Decision (7–2 vote) in the case of *Stanford v Roche*. The Supreme Court reaffirmed that IP is initially owned by its creators. The University’s claim to IP ownership by policy is thus invalid—a university cannot write a policy to own something that is owned by someone else.

Prior to 2011, faculty members were not asked to sign global IP assignments (so-called present assignments, which transfer ownership of future IP). These faculty members thus own their nascent IP. Upon disclosure of inventions, IP assignments are executed by these scholar-owners to give Pitt ownership. Thus, ownership transfer of potentially commercializable inventions has proceeded and continues to proceed in an orderly fashion.

The University reacted to the *Stanford v Roche* decision quickly by requiring new faculty members to sign IP assignments before the start of their employment. This was done quietly, with no discussion. Then in the fall of 2014, the University moved to require all faculty members to sign such assignments, again without discussion. After objections were raised, only faculty members with federal funding were forced to execute a form. Further, they were given an option of ownership transfer forms (IP assignments, called Options A and B) or a plain vanilla agreement to the current University policy (Option C).

It was further stated in the fall of 2014 that only faculty members were required to sign IP forms, but this has not proved true. Students and postdoctoral fellows are also being required to sign as a condition of being listed as “key personnel” on grant applications.

Thus, who owns what nascent IP at Pitt depends upon many factors. If you are a faculty member, it depends upon whether you started before or after 2011. It further depends on whether you signed Options A/B or Option C. This further depends on your start date: if you started before 2011 and signed Option C, your signature is valid. If you started after 2011 and signed Option C, your signature is not valid. If you are a student or a postdoc, it depends on when you started, whether or not your were listed as key personnel on a grant application, and if so, which form you signed.

In a word, IP ownership at Pitt is a mess.

What should a new Pitt IP policy look like? It should be simple (in the limit, there are only two options, Pitt owns or the scholars own). It should be flexible, to allow for many kinds of grants, contracts, collaborations, and so on. It should be fair; scholars are scholars, so there is no basis for having a different policy for faculty members as opposed to students. It should be consistent with Pitt’s copyright policy (both policies deal with property created by scholars). And most important, it should be based on Pitt’s core values as a University.

The patent policy committee should propose a policy that is founded on scholar ownership of nascent IP. A specific policy proposal follows in Part 3 of this white paper. With the proposal is a justification that scholars rightfully (and lawfully) own the nascent IP that they create. The University has neither the basis nor need to claim ownership of nascent IP. The University can gain ownership to commercializable IP by an orderly process that is similar to the current process of disclosure but that adds an ownership transfer step.

PART 3. IP Ownership Policy Proposal

Current policy

(<https://www.cfo.pitt.edu/policies/policy/11/11-02-01.html>)

“The University claims ownership and control of the worldwide patent and intellectual property rights which result from activities of its faculty, staff, and students.”

Proposed new policy

“Except as stipulated below, it is University policy that ownership of intellectual property (IP) rights created in the course of Scholarly Work remains with the Scholars who created the IP.

The exceptions are:

–The University retains ownership of IP rights in works created as Assigned Tasks in the course of administrative activities.

–In sponsored or contract research activities, ownership of IP rights may be determined by the regulations of the sponsor or the terms of the contract.

Owners of IP rights created in the course of their Scholarly Activities grant the University a free, non-exclusive, non-transferable and irrevocable license to copy or use such works solely for the purposes of teaching and research.”

Definitions:

Scholar: Any University member involved in research or teaching activities. For example, tenured and non-tenured faculty members, staff members, postdoctoral fellows, graduate and undergraduate students.

Scholarly Work: Any work created by a Scholar as part of that Scholar’s expert activities at the University.

Assigned Task [NB, from current Pitt copyright policy]: Any task within the scope of University employment that is not a Scholarly Work. An assigned task might include the development of course materials that are posted on the internet or made available in some other format, when this has been specifically contracted for as an institutional work.

How the policy works

The policy has a default position—scholar ownership of IP—with two exceptions that allow for University ownership. Like any entity, the University can contract externally for IP. The “assigned task” exception ensures that the University can contract internally for IP as well. An “assigned task” is different from “scholarly work”.

In the “grant/contract” exception, the policy allows the terms of a grant or contract to supersede the default. This gives full flexibility to both scholars and the University to enter into modern contract deals and to accept grants with various ownership requirements. For example, if an agency requires that the University take ownership of IP as a condition to fund a given grant proposal, then the policy allows this.

In the final sentence, inventors are prohibited from charging the University for their inventions, no matter who ultimately obtains the rights to such inventions. Every member of the University has a communal right to use an invention by a Pitt scholar with no cost for IP (provided that the invention is not used for profit).

Justification for the default policy

The justification for the proposed default policy is plain. The principle that “IP is initially owned by its creators” dates back centuries and is the bedrock of US IP law. The Supreme Court recently reaffirmed this in the 2011 *Stanford v. Roche* decision, effectively stating that the Bayh-Dole act does not grant universities ownership of the IP of their scholars. By law, scholars own the IP that they create.

In the wake of *Stanford v. Roche*, many universities are taking ownership of IP through obligatory IP assignment forms. Some universities justify such assignments by saying that scholars are employees for hire. But scholars are not employees for hire because the university does not direct their work.

Scholars are hired to direct their own work. A related justification is that a university is entitled to own the IP of its scholars because the university provides its scholars with resources (space, salary, equipment, and so on). A university has no such entitlement because its resources (notably grants, contracts, overhead, tuition and endowment funds) come directly from the work of its scholars.

A university does not provide for its scholars. Instead, a university is a community of scholars that provides for itself. Accumulating resources and distributing them back to scholars for research, teaching and service is a university's *raison d'être*, not a justification for IP ownership.

Summary: University scholars are hired to do research, teaching and service, not to create IP. When scholars create IP, they rightfully own it (absent prior, voluntary agreements to the contrary). Scholars may choose to exchange ownership of IP with the University or another entity in return for funding or other opportunities provided by grants or contracts. Scholars may choose to exchange ownership of IP with the University in return for an opportunity for development through the agency of the Office of Technology Transfer. These exchanges are their choice as rightful owners of IP.