A decision from the United States Supreme Court in the summer of 2011 and the passage of the America Invents Act late the same year demonstrate the continued interest of courts and lawmakers in determining the contours of intellectual property protections. One area of interest relates to intellectual property protection attaching to student-created work at universities. Most of the cases and literature discussing this issue analyze the work of graduate students at research institutions. These universities typically have comprehensive technology transfer departments and intellectual property policies and agreements. Less attention is given to undergraduate work. Of particular interest in the present paper, is the extent to which the law and university policies determine the ownership and rights of stakeholders in undergraduate research. Narrowing the issue even further, the question is raised as to the ownership of ideas generated by undergraduate students in the context of entrepreneurship competitions in business schools. Thus, if a student proposes a business model or idea in a competition that eventually becomes the next great social networking platform, what rights, if any, do the student and university have in the creation? In offering provisional answers to this and similar questions, we analyze the limited law available, the literature related to intellectual property issues raised by student-created work, and a convenience sampling of university business plan competition guidelines from different types of institutions. We conclude that traditional legal doctrines have problematic applicability to the scenarios discussed and that universities should adopt ethical and responsible policies that govern undergraduate-generated ideas and creations.

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I. INTRODUCTION

This article analyzes the intellectual property issues raised by undergraduate research and student-created ideas. Even though universities are often sophisticated actors in the intellectual property world, many may be unaware of the legal tensions that arise when undergraduate students do research or generate business ideas for a class or an entrepreneurship competition. More than this, this article suggests that existing legal doctrines are not directly applicable to these situations. The broad contours of the legal relationship between undergraduates and universities continue to change, and this change creates uncertainty. Thus, universities must proceed carefully and responsibly in creating policies related to undergraduate research and development.

A. The American Invents Act and Recent Legislative Intellectual Property Changes

Intellectual property law remains a very active field for both the practicing lawyer and the legal scholar. In recent years Congress fundamentally altered American patent law by adopting a “first-to-file” regime. On September 16, 2011, the President signed the Leahy-Smith America Invents Act. This legislation replaces the “first-to-invent” patent system with a “first-to-file” regime that is more consistent with international rules. Congress amended title 35 U.S.C. § 102 regarding novelty and prior art to prevent the grant of a patent if “the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention. . . .”\(^1\) Furthermore, the new legislation provides that “[a]ny strategy for reducing, avoiding, or deferring tax liability, whether known or unknown at the time of the invention or application for patent, shall be deemed insufficient to differentiate a claimed invention from prior art.”\(^2\) Along with these amendments there is an additional provision directing the U.S. Patent and Trademark Office to establish an eight-year transitional program to re-examine certain business method patents.\(^3\) This newly created “first-to-file” rule becomes effective on March 16, 2013.\(^4\)

\(^2\) Id. at § 14.
\(^3\) Id. at § 18.
While the legislation contains other provisions beyond the score of this paper, the highlighted items reflect significant changes and the overall importance of intellectual property in the nation’s current economic and political environment. Arguably, Article I, Section 8, Clause 8 of the Constitution favors a “first-to-invent” rule since it states that Congress has the power “to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.” However, a majority of the Supreme Court would likely not be swayed by this argument. In *Golan v. Holder*, decided on January 18, 2012, the Supreme Court ruled in a 6-2 decision that legislation that conformed U.S. law to the treaty requirements of the Uruguay Round Agreements is proper.\(^5\) Inasmuch as the “first-to-file” legislation conforms to international standards, a Court majority would likely uphold the broad authority of Congress to make similar changes in this situation. The “first-to-file” standard has implications for all inventors who delay filing and is a potentially troublesome issue in a more relaxed university research environment.

**B. Universities, Intellectual Property, and United States Supreme Court Decisions**

Numerous intellectual property issues arise in the university setting. Universities are home to highly skilled, driven, and creative people. This combination of intelligence, creativity and drive mixes with an organizational culture that seeks to push the boundaries of knowledge, and the hoped-for result is a generation of new ideas. These new ideas, in turn, may be subject to intellectual property protection. Because the academic setting offers both a collection of educated experts and the lab space and research facilities needed to reduce abstract ideas to tangible form, major universities have historically been sophisticated participants in intellectual property law.

Evidence of university sophistication in the intellectual property arena is manifest in the profusion of patents generated by science faculties and professional schools of engineering and medicine, as well as the technology transfer offices and policies typical at research-intensive institutions. Of note, a recent high-profile U.S. Supreme Court case dealing with patent protections arose in the academic context. On June 6, 2011, the Court held 7-2 (Breyer and Ginsburg dissenting) that the Bayh-Dole Act did not automatically provide federal contractors (universities) ownership of

federally funded inventions. The majority interpreted the legislation in a manner that distinguished inventions created by the contractor and inventions made by employees of the contractor. The end result was that a conflict between a Stanford University research professor’s agreement to assign future inventions to a private firm was resolved in favor of the private firm. The Stanford language “agree to assign” was overridden by “will assign and do hereby assign.” Dissenting Justice Breyer, joined by Justice Ginsburg, found this interpretation inconsistent with the basic purpose of the Bayh-Dole Act, which was to “encourage those institutions [universities] to commercialize inventions that otherwise might not realize their potentially beneficial public use.”

Justice Roberts wrote the majority opinion, and repeatedly returned to the theme that rights in an invention belong to the inventor. While Congress could modify this inventor ownership rule, the majority found fault with Bayh-Dole’s language in failing to specifically vest title to inventions in any specific entity or person as well as the language contained in the Stanford agreement at issue before the court. The clear lesson from the decision is that assignment agreements must contain both “agreement to assign” and “actual assignment” language.

The Supreme Court has issued a number of intellectual property decisions in recent years. The Court in several decisions has upheld the power of Congress to implement treaty obligations originally established under the Berne Convention for the Protection of Literary and Artistic works. While a review of these decisions is beyond the scope of this article it seems that globally uniform intellectual property protections will increasingly become the norm.

II. SCOPE AND METHODOLOGY

The methodology and scope of this project involve four areas. First, we examine current legal doctrines and determine they lack sufficient application to the undergraduate research context. Second, we review the literature on the changing relationship of the student-university relationship. Stated briefly, this relationship may include fiduciary duties in some cases, but older doctrines like in loco parentis—which might have been extended to impose strict limits on how universities could act with regard to undergraduates and their ideas—are being replaced in favor of more consumer-driven concepts. To the extent scholarly literature exists that touches on the undergraduate intellectual property dimension, it tends to be

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7 Id. at 33.
most helpful for science and engineering programs and not directly applicable to business models and entrepreneurship competitions often found in business schools. Third, we examine business plan competition guidelines from various types of universities, finding they are both inconsistent and not sufficiently tailored to resolve disputes between universities and undergraduates in the business school competition context. And finally, we make provisional suggestions about how universities might create responsible and ethical policies that guide their decision-making in the undergraduate intellectual property context.

III. LEGAL BACKGROUND

A. Definitions of “Inventor” and “Author”

The focus of this overview of the law is on student-created, rather than faculty-developed, intellectual property. It is an axiomatic that only an inventor may apply for a patent; however, the federal patent statute does not define the term “inventor.”8 Assisting an inventor does not make one an inventor. Thus, a student who followed the suggestions of a professor in conducting experiments does not qualify as a co-inventor.9 In like manner to patent statutes, the copyright statute does not define the term “author.” A “joint work” is defined; however, as “a work prepared by two or more authors with the intention that their contributions be merged into inseparable or independent parts of a unitary whole.”10

B. The Shop Rights Doctrine

One area of intellectual property law that could be troublesome for universities and undergraduate students is the “shop rights” doctrine. The U.S. Supreme Court in 1896 used an estoppel doctrine to justify a shop right when the employee had created the invention at the employer’s place of business.11 Thus the employee is estopped from demanding royalties from the employer when the employer’s “shop” was used to create the work. The shop right concept might allow a university to make royalty-free use of a student’s invention created with the university’s resources. Even a casual use

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8 35 U.S.C. § 102(f) (2012) (“he did not himself invent the subject matter sought to be patented”).
9 Stern v. Trs. of Columbia Univ., 434 F. 3d 1375, 1378 (Fed. Cir. 2006). The court also noted that the burden of proof to establish one as an inventor is “clear and convincing evidence.”
of the university’s assets might be sufficient. The shop rights doctrine would not result in university ownership of the work, but might give the university a non-exclusive implied license to use and profit from the work. Outside of the student context, the classic “shop right” is understood to be non-assignable and non-exclusive. A pre-invention contract has also been found to be unconscionable due to overreaching. Thus, while a university might assert some form of shop right when its facilities are utilized, a broadly worded student assignment of future rights seems unenforceable.

C. The Work-for-Hire and Hired-to-Invent Doctrines

In addition to the common law shop rights doctrine, the “work for hire” doctrine is found in the Copyright Act. The work for hire doctrine technically applies to copyrightable works while the “hired to invent” doctrine applies to patentable inventions. The phrases are sometimes used interchangeably. Unlike shop rights, which merely create an implied license, both of these doctrines may vest actual ownership of the intellectual property in the employer. In addition, both involve express or implied contracts, which makes the applicability of work for hire or hired to invent problematic in the undergraduate/university context. One might argue that agreements signed by undergraduate students that are prepared by a university and transfer intellectual property created by the student to the university are unconscionable adhesion contracts. Moreover, questions might arise as to consideration given by the student: what consideration is present in such a contract? Consideration is less problematic in the graduate student or research fellow context, but undergraduate students rarely enjoy the same university-provided salary or assistantship as that offered to advanced students and researchers. A student might even assert their status as a minor in some limited situations, although the typical university student is an adult. For these reasons, serious concerns prevent the easy application of these contractual licensing arrangements for undergraduate generated works.

A classic 1933 U.S. Supreme Court decision addressed the ownership of inventions made by employees. This decision affirmed the well-known rule that the employer owns the invention if the employee was employed to invent, but not otherwise. Furthermore, the employer only owns the invention if the employee was hired to invent, and the burden of proof is on the employer.

to prove that the employee was hired to invent the item in question. A student assignment or policy statement seldom has this degree of specificity.

Some states have codified the ownership of inventions created in the scope of university employment or with the use of the university’s facilities. An Ohio statute denies “any rights” to a “faculty member, employee, or student” unless the board of trustees creates contrary rules. These statutes could face a preemption challenge and lack a sufficient litigation record to be interpreted in the context of students.

As the following cases illustrate, courts are reluctant to mechanically apply university handbook or union contract language. In a case involving a union contract, an adult education counselor and part-time instructor co-authored a book for adult students on her home computer outside of normal work hours. The United States District Court for Oregon found significant factual disputes upon reviewing motions for summary judgment. The shifting locations and demands of university faculty work created a tangled web. Another decision involving a college’s full-time staff photographer applied work-for-hire analysis, finding that a policy statement alone was not a sufficient contract to vest ownership of photographs in the photographer.

A second university employee photographer case determined that the work-for-hire doctrine granted ownership to the university and that a policy statement was insufficient to change this determination. Yet another case involving a faculty member inventor found that a jury must determine if an implied contract was created by a faculty handbook and university policy statement. As the court wrote:

The general rule is that an individual owns the patent rights to the subject matter of which he is an inventor, even though he conceived it or reduced it to practice in the course of his employment. There are two exceptions to this rule: first, an employer owns an employee’s invention if the employee is a party to an express contract to that effect; second, where an employee is hired to invent something or solve a particular problem, the property of the invention related to this effort may belong to the employer. Both exceptions are firmly grounded in the principles of

contract law that allow parties to freely structure their transactions and obtain the benefit of any bargains reached.\textsuperscript{23}

Without a contract, the question becomes whether the employee was hired-to-invent, essentially an implied-in-fact contract assigning intellectual property rights to the employer.\textsuperscript{24} While this is frequently hard to establish, a finding that the university “employment was research directed towards the obtaining of patents” made the university the owner of the inventions in question.\textsuperscript{25} If the employer had a specific research project, this becomes significant in finding that the employee was hired-to-invent.\textsuperscript{26} Academic assignments are typically not that specific; however, one might argue that a graduate student’s dissertation topic is sufficiently specific, or that a graduate researcher whose fellowship is tied to a discrete project might fall within the specificity requirements of the hired-to-invent rule.

In a 2000 decision previously quoted, \textit{Banks v. Unisys}, the Court of Appeals for the Federal Circuit reversed summary judgment for an employer when the employee refused to sign a standard form assignment of inventive rights when hired.\textsuperscript{27} The key facts were the employee’s failure to sign the assignment and the employer’s failure to specifically address the question of invention of ownership. Clearly a university that fails to obtain assignments is at a disadvantage. In a 2009 decision, the Fourth Circuit affirmed summary judgment for a plagiarism detection service, Turnitin, on the grounds of fair use.\textsuperscript{28} Turnitin requires students to accept a Click-Wrap agreement as a condition of submission that states that “[i]n no event shall iParadigms…be liable for any…damages arising out of or in any way connected with the use of this web site.”\textsuperscript{29} The court upheld this language.

In conclusion, the traditional work-for-hire and hired-to-invent doctrines are difficult to apply to student works because of the dubious status of the student as an employee and the general nature of educational programs. These concerns are even more pronounced in situations involving undergraduates, whose work is less focused than a graduate student engaging in specific research. While courts will not uncritically apply broad university policy statements, there may be some opportunity for the university to assert a shop right when university resources are used beyond those required to complete class assignments. Computer labs and business incubator facilities are the sorts of resources often used by students in generating business ideas.

\textsuperscript{23} \textit{Banks v. Unisys Corp.}, 228 F. 3d 1357, 1359 (Fed. Cir. 2000) (citations omitted).
\textsuperscript{24} See Pederson v. Akona, LLC, 429 F. Supp. 2d 1130, 1141 (D. Minn. 2006).
\textsuperscript{25} \textit{Regents of Univ. of Colo. v. K.D.I. Precision Prods., Inc.}, 488 F. 2d 261 (10th Cir. 1973).
\textsuperscript{27} \textit{Banks v. Unisys Corp.}, 228 F. 3d 1357 (F.C. 2000).
\textsuperscript{28} \textit{A.V., et al. v. iParadigms, LLC.}, 562 F. 3d 630 (4th Cir. 2009).
\textsuperscript{29} \textit{Id.} at 635.
Finally, as the Turnitin decision indicates, a very project-specific agreement assented to by the student may be upheld.

D. Legal Relationships Between the University and its Students

1. Fiduciary Duty Cases

Scholarly analysis of the relationships between universities and their students sometimes focuses on the nature of the legal rights and obligations flowing between the two groups. One method that students have used to assert rights against professors or universities takes the form of a claim for breach of fiduciary duty. *Chou v. University of Chicago* is a well-known case in which a post-doctoral research assistant was able to assert a claim of breach of fiduciary duty against her departmental chair and, under a *respondeat superior* theory, against the university as the chair acted as the university’s agent in implementing university policies.\(^{30}\) Of particular note was the fact that the chair had wrongfully named himself as inventor of her discoveries.\(^{31}\) A similar graduate student breach of fiduciary duty case noted that the university “represented that it would safeguard its students from faculty misconduct and provide a nurturing environment for its students.”\(^{32}\) At least one court has determined that breach of fiduciary duty claims under state law are not preempted by federal copyright law.\(^{33}\)

Making sense of the numerous fiduciary cases is not easy. According to research done by Professors Scharffs and Welch, fiduciary duty cases in the student-university context can be best analyzed and interpreted based upon three key factors: the degree of duty, the magnitude of the breach, and how difficult it would have been to fulfill the duty.\(^{34}\) Hundreds of fiduciary duty cases support the idea that rulings are not made on simply whether a duty existed and whether a breach was present. As Supreme Court Justice Felix Frankfurter explained in *Securities & Exchange Commission v. Chenery Corp.*, “‘to say that a man is a fiduciary only begins analysis; it gives direction to further inquiry. To whom is he a fiduciary? What obligations does he owe as fiduciary?’”\(^{35}\) Scharffs and Welch describe these variables as terms on “sliding scales,” as opposed to simply affirmative or negative responses.\(^{36}\) They also suggest that the “extent to which the conduct

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30 *Chou v. Univ. of Chicago*, 254 F.3d 1347, 1362-1363 (Fed. Cir. 2001).
31 *Id.*
35 *Id.* at 165 (quoting *Chou*, 254 F.3d 1347).
36 *Id.*, at 166.
exceeded or fell short of the required level of performance” is considered when courts determine the “amount or type of appropriate remedies.”

Without using this methodology, it seems as though fiduciary duty case rulings are entirely case specific and dependent on an indefinite number of variables. Attempting to predict the outcome of any fiduciary case in the student-university context is nearly impossible given the number of cases with similar facts, but sometimes conflicting results. While acknowledging that court decisions are in no way systematic on this topic, Scharffs and Welch believe their sliding scale model makes sense of many of the hundreds of student-educator fiduciary cases. Coupling a high degree of duty with a high degree of breach, as in Chou, it is reasonable to see why the court is likely to rule in favor of the plaintiff, and to award damages accordingly. At the opposite end of the spectrum are cases like Andre v. Pace University, where students used a fiduciary duty claim to seek very limited damages when they alleged the university allowed them to take a class they were not academically prepared to take. This latter case illustrates a situation where, even with a fiduciary duty in existence between university and student, the level of breach was significantly lower and so the university owed nothing to the students as a result. Fiduciary duty claims continue to receive court treatment, and it seems apparent that the law has yet to clearly define how this might apply to a dispute between an undergraduate and a university related to student-generated intellectual property.

2. The Demise of In Loco Parentis and the Rise of Students as Consumers

The rise of the fiduciary duty claim is merely part of the changing legal landscape of the student-university relationship. It is now well-understood that the old doctrine of in loco parentis, wherein the university essentially stood in the shoes of the student’s parents for purposes of caring for the student and looking out for their best interests, is dead as applied to universities. In loco parentis gave wide latitude to colleges in setting boundaries for student conduct and behavior, and also imposed duties of protection on institutes of higher education. Discussions of the legal relationship between student and university struggle for precise definition, largely because the prior clarity provided by in loco parentis no longer

37 Id., at 167.
38 Id., at 166.
39 Id. at 166-67.
exists. Instead, as K.B. Melear points out, the trend of the last several decades is to view the university/student relationship through the eyes of contract law. The paternalism of older legal doctrines is gone, and now “the closest analogy for the relation between the college and the student is that between a business and a client, consumer, or tenant.”

Viewing the university/student relationship as consumer-oriented and driven by contract law may present both opportunities and problems for universities. In the first instance, contract law is less demanding than in loco parentis, and thus the university has greater latitude in how it seeks to relate to its students. In contrast, however, contract and consumer defenses like deceptive advertising, unconscionability, unequal bargaining power, and fraudulent inducement may be on the near horizon for students seeking to protect their legal rights. As noted above in relation to the work-for-hire and hired-to-invent doctrines, if contract law governs the parties’ relationship, then problems related to consideration may arise. Thus, the demise of in loco parentis and its replacement by contract law may merely trade one set of legal risk factors for another equally risk-laden set of theories.

A few scholars have attempted to make sense of the relationship between the university and the potentially protectable works created by students. Very little of this scholarship, however, is explicitly targeted at the undergraduate context. On the rare occasions when it is focused in this manner, such as that offered by Karen Nordheden and Michael Hoeflich in the late 1990s, it tends to analyze science and engineering disciplines. Thus, these two scholars ask important questions about the effect of science and engineering faculty using undergraduate students in ongoing lab-based research projects. To be sure, this focus on the STEM disciplines is necessary, given the potentially protectable work created in these fields. But no less important are business plans, business models, marketing proposals, slogans, and potentially protectable distinctive marks that undergraduate

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43 K.B. Melear, From In Loco Parentis to Consumerism: A Legal Analysis of the Contractual Relationship Between Institution and Student, 40 NASPA J. 124 (No. 4, Summer 2003).
44 Goodman & Silbey, supra note 41, at 23.
45 In this context, one is reminded of the recent spate of lawsuits against law schools based on an allegation that the schools misled former students through placement and employment data. It is worth noting that at least one of these lawsuits has been dismissed. Eliza Shapiro, NY Law School Grads Lose Lawsuit Against Their Alma Mater, NEW YORK MAGAZINE (Mar, 22, 2012), http://nymag.com/daily/intel/2012/03/ny-law-school-grads-lose-lawsuit-against-nyls.html.
business students might generate as part of an entrepreneurship competition at a business school. These activities do not fit the core definition of student-generated research, so the literature that analyzes how intellectual property issues are handled as part of ongoing scientific research has only marginal applicability to the present issue.

The literature on legal issues in student business plan competitions is still in a developmental phase. This is likely because the legal status of the participants is uncertain and there are no reported cases defining relationships and duties. Having said that, Anthony Luppino is one of the few scholars to offer a substantive discussion of business competitions in his 2009 article dealing with university-generated intellectual property. Luppino is rightly concerned about the potential for claims of partnership status among different members of a business model competition team. But his focus is primarily on making sure students are protected: he suggests that the hosting university recommend that students obtain legal counsel and even form business entities to help mitigate legal risks associated with owning a nascent business. While these are well-taken recommendations framed by the goal that students who seek to be business owners ought to be prudent legal actors, they do not primarily focus on the tension between the university and the undergraduate business student. Thus, the present article seeks to extend Luppino’s reach by suggesting best practices for universities seeking to host competitions and encourage entrepreneurial development.

IV. UNIVERSITY BUSINESS MODEL COMPETITIONS AND INTELLECTUAL PROPERTY POLICIES

A. Business Plan Competition Rules

Many universities encourage business students to find real-world applications for their ideas by sponsoring entrepreneurship competitions. These competitions may be relatively simple arrangements, whereby undergraduates offer business ideas in a short “elevator pitch” format, or more complex events where non-student competitors from around the world enter business model ideas for the chance to win hundreds of thousands of dollars. In some of these more sophisticated competitions, the university may seek to be an investor in the winning businesses. This latter type of competition often attracts not only exceptionally talented students, but also ideas that have potential to revolutionize whole industries and ways of doing

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48 *Id.* at 420-22.
business. With this background in mind, there are two primary types of business plan competitions: 1) grant competitions, where the winners are given more modest sums of money to use in getting their business idea off the ground; and 2) equity competitions, where the prizes awarded are more substantial and the university or competition judges may seek to be investors in the businesses.

Some competitors in more limited competitions offer little more than an idea and potential. Other times the competitors offer much more sophisticated plans and models, which might include intellectual property. This latter group of participants may or may not be the creators or inventors of the intellectual property, but rather the promoters or marketers of a product invented by someone else. Ownership of business competition ideas is not always easy to establish, whether in the university/participant relationship, or in the participant/inventor relationship.

A prime example of a high-profile business plan competition leading to intellectual property concerns recently arose from Massachusetts Institute of Technology’s Clean Energy Prize competition. The Institute’s webpage for the prize bills it as “the world’s premier student competition for early-stage energy ventures with the potential to catalyze a new generation of clean energy solutions.”49 In 2011, the Chronicle of Higher Education reported that the winner of the $200,000 prize, CoolChip Technologies (a company started by three MIT graduate students), won the prize without owning or having permission to use the technology for which the prize was awarded—the so-called Sandia Chip, a cooling device for electronics created by a researcher at Sandia National Laboratory.50 The students pitched their business idea as being based on technology to which they had rights—a presentation they conceded in retrospect was “misleading”—and collected a major prize for intellectual property that Sandia Labs claims the students had no explicit or implicit authorization to use.51 The chairman of the Clean Energy Prize at MIT distanced the competition from the ownership dispute, claiming the whole contest is an “academic exercise.”52 While there is no claim in that dispute that MIT, as a university, has any ownership interest in the technology, the example illustrates the scope of the problem whereby

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51 Id.

students are presenting business ideas that rely on patentable technology in an academic context when their legal rights to profit from the technology is unclear. Moreover, MIT’s characterization of the competition as a purely academic exercise is questionable, especially given the hundreds of thousands of dollars awarded as prizes.

Entrepreneurship competitions may have detailed rules that govern the existence and dissemination of intellectual property issues arising among the contestants. For this article we reviewed a convenience sample of 15 business plan competitions at research-intensive universities in the U.S. that awarded at least $50,000 in cash prizes in their most recent competition. We believe this sample serves as a good source for best practices given the universities’ research capabilities, internal legal resources, and familiarity in dealing with intellectual property concerns related to faculty and student created work. Within the sample group, 12 of the 15 institutions included at least some reference to intellectual property rights in the competition guidelines. However, these 12 institutions were inconsistent in how they addressed the issue.

The most common approach was to include statements that teams should own or obtain any intellectual property rights that serve as the basis for their business opportunity and should be aware of the impact of public disclosure on potential intellectual property rights. Even in this general approach, the universities lacked consistent language and instruction for student participants (e.g., whether as a requirement or merely a recommendation). While this approach maintains the integrity of the competition and is a helpful reminder to students about the importance of intellectual property rights, it does nothing to address potential claims the university may have on intellectual property that is the basis of the submitted business plans. For these universities and those whose competitions did not address intellectual property issues at all, the strongest argument in their favor in any potential dispute would be that the university-wide policies

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regarding intellectual property sufficiently address any student-created work that may be submitted in the competition. This could be an intentional decision made by the universities’ legal departments and/or technology transfer offices or simply the result of competition organizers not being fully aware of the issue or failing to coordinate with the appropriate university office.

A handful of competitions in our sample had guidelines that addressed the university’s potential rights to intellectual property with respect to submitted business plans. While these institutions lack consistency, their different approaches provide examples that may be useful in developing best practices.

Arizona State University’s Innovation Challenge clearly states in its competition guidelines that the university does not obtain any intellectual property rights as a result of the student submitting a business plan. However, the competition’s guidelines do not address whether the university might have rights to intellectual property as a result of other circumstances.

The guidelines for Duke’s Start-up Challenge disclaim university ownership, but include statements instructing participants relying on technologies owned by the university to consult with its Office of Licensing and Ventures. The statements also encourage participants to disclose to that office any technology created using university resources as soon as possible. However, these statements are only included in guidelines applicable to faculty and staff submissions, making it ambiguous how the university will treat student-created work. Finally, Duke’s Start-Up Challenge Rules warn students that disclosure of their ideas in the competition may defeat any later claim of confidentiality, and may even affect future patentability.

The guidelines for MIT’s Clean Energy Competition include more detailed statements regarding intellectual property rights, including the following statement:

Entries should be made with the full understanding of MIT’s Regulations on Intellectual Property Rights. It is the responsibility of the entrant to ensure that no third party, such as a research

57 We were unable to locate rules from previous years to determine if changes were made in response to the Cool Chip Technologies situation described herein on page 9. Interestingly, MIT hosts a separate business plan competition that does not include the same set of guidelines regarding intellectual property as the Clean Energy Competition.
sponsor or research assistant who participated in their research, has any rights on the contents that may prevent its exploitation.

The online version of the above statement includes a link to the regulations referenced therein, which are a comprehensive, well-developed set of policies addressing a variety of intellectual property issues for the university. Included in these regulations is a clearly outlined statement of when the university has rights in intellectual property resulting from student-created work.

The Wharton Business Plan Competition at the University of Pennsylvania is the only competition in our sample that contains a comprehensive discussion as to whether the university has claims on student work in the competition’s guidelines.\textsuperscript{58} The language encourages student-created work and lists the specific situations when the university will claim rights to intellectual property. These instances are similar to those in MIT’s regulations and the university-wide intellectual property policies at many of the other schools in our sample.


The American Association of University Professors has a section of its various policies devoted to the rights and freedoms of students. The AAUP policy on graduate students specifically states, “Graduate students are entitled to the protection of their intellectual-property rights.”\textsuperscript{59} But the policy does not expound on this protection other than the requirement that graduate students get credit for co-authored publications. Presumably, the rights of many or most of these graduate students are swept within the broad scope of the university’s technology transfer or intellectual property policy. More significantly for present purposes, the AAUP’s statement on undergraduate rights does not mention intellectual property at all. While the AAUP’s policies are not all encompassing, the lack of attention paid to undergraduate rights illustrates the legal lacuna with which this paper is concerned.

Research universities typically have a well-developed set of policies governing the intellectual property creations made on campus or with university-owned facilities. Thus, for instance, Stanford University provides


that creators of copyrighted works retain exclusive rights in their work, but that patents and inventions must be disclosed and assigned to Stanford.60 Sweeping intellectual property policies typically cover only full- and part-time employees, however, and undergraduates who are not employed by the university may not be covered.61

V. RECOMMENDATIONS

If the law is unclear, and if current policies are geared more toward graduate students and paid researchers, then what best practices are there for universities seeking to host business plan competitions and encourage innovation among undergraduates? As a supplement to the suggestions made by Luppino in 2009,62 we offer the following steps that business school administrators and entrepreneurship competitions should take in navigating the intellectual property issues arising in this context:63

1. The university hosting the competition must first determine its stance on intellectual property created by undergraduates in a business plan competition. Generally, the trend seems to be to seek as much protection as possible, though this practice raises questions about the nature of the student/university relationship, particularly in universities focused on teaching. Major exceptions, like the Duke and Penn Wharton competitions noted above, obviously exist. To illustrate with an oversimplified dichotomy, in a research-intensive university that hosts a competition where part of the attraction for student competitors is the presence of actual investors as judges, it makes more sense for the university to consider carefully before releasing all claims to intellectual property. These are equity-based competitions where winning competitors take home substantial prize money and may have reporting requirements tied to their success. Both the university and outside judges often seek to invest in the winning businesses. With this foundational set of understandings, in an equity-based competition ownership interests in intellectual property

61 Luppino, supra note 47, at 376.
62 Luppino, supra note 47, at 420-22.
63 Broadly speaking, these recommendations fall within the recent trend in higher education law to focus on enterprise-level risk management. See generally, Peter F. Lake, Private Law Continues to Come to Campus: Rights and Responsibilities Revisited, 31 J.C. & U.L. 621, 622 (2005).
can be part of the university’s investment in the student-generated creation. In contrast, the competition hosted by a teaching university tends to be more akin to a purely academic exercise with active learning components. The prize money is more like a grant, and there are no equity interests to negotiate. In the grant-based competition, it would appear to be overreaching in the university/student relationship to assert an interest in intellectual property.

2. If the university or competition organizers seek to assert an interest in intellectual property generated by undergraduates, they must first consult with the university’s office of general counsel. Organizers should consult with the university’s legal office on a periodic and recurring basis, no less than once a year or in advance of each competition sign-up period. University lawyers may suggest changes to competition guidelines that better align the university with the current state of the intellectual property and contract law. In addition, university lawyers are in a better position to assess the strengths and weaknesses of the university’s claim on any intellectual creation, whether under a shop rights theory, implied contract, or work for hire/hired to invent relationship.

3. In addition to the general counsel, organizers should consult with the university’s technology transfer office. If the university in question does not have a technology transfer office, it is some indication that the school’s ability to handle intellectual property licensing and negotiations is limited, and organizers ought to proceed cautiously.

4. Regardless of whether the university sets a policy of asserting rights or not, organizers of the competition should be familiar with the university’s overarching intellectual property policy. Many policies are exceptionally broad in scope and sweep within their ambit work created by any student—whether a graduate researcher in a lab or a 19-year old freshman undecided major. In addition, and subject to final review by the general counsel’s office, competition promoters should incorporate their university’s intellectual property policy into the guidelines and rules for the business plan competition. Having made this suggestion, however, competition organizers should also be aware that many universities open their competitions up to non-students, and in that instance the
university’s intellectual property policy may have minimal legal effect.

5. Generally, the hosting university should decline to enter into non-disclosure agreements with students presenting business plans and models. In addition, competition guidelines should make clear that all business plans and models are subject to public disclosure, which may affect trade secret status and other intellectual property concerns.

VI. CONCLUSION

This paper has sought to provide an overview of a recurring legal problem, namely the tensions inherent between students and their universities in the intellectual property context. The relationship between the university and its undergraduate students deserves special consideration due to the relative lack of law and scholarship on the issue, and we emphasize the intellectual property concerns in the typical business plan competition. Our ultimate recommendation is that there is enough uncertainty in the law that universities must proceed cautiously. The retention of intellectual property rights by the university is probably best pursued by those contests that are well-funded equity competitions where students expect to attract investors seeking a return on start-up funding, or when the university hosting the competition is exceptionally adept at navigating uncertain legal terrain through extensive technology transfer and intellectual property policies. Even in these situations, however, there are no guarantees of success.