


2010 MAGS Annual Meeting



INTELLECTUAL PROPERTY


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Intellectual Property Perspective in This MAGS Session

- Focus taken is that of a Graduate Dean whose duties include certain aspects of IP oversight in a comprehensive, master's institution – Missouri State University
- Not a discussion at the level of legal counsel in an institution


2 MAGS Annual Meeting 4/22/2010



Profile of Missouri State University

- Located in Springfield, MO – a city of 156,000 with 431,000 metropolitan statistical area
- Master's Large – Carnegie Classification
 - 20,000 enrollment distributed in 6 colleges
 - 3,400 graduate students
 - 48 graduate programs; 44 of them master's
- Largest graduate programs in business, education, and the health sciences
- Good range of graduate programs in the sciences, but no engineering


3 MAGS Annual Meeting 4/22/2010



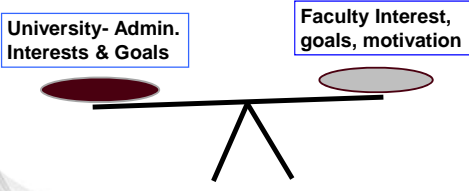
Purpose of a University IP Policy

- To provide the necessary incentives and protections to encourage the discovery and development of new knowledge and its application and transfer for the public benefit
- Guiding objectives
 - Ensure the educational mission (discovery, learning, engagement)
 - Optimize the environment and incentives for research & creation
 - Bring products of creative effort into practical use
 - Protect interest of people of the state through recovery of investment
 - Recognize and protect interests of all parties –public, creators, University, sponsors of research

4 MAGS Annual Meeting 4/22/2010



The Balancing Act!



5 MAGS Annual Meeting 4/22/2010



Goals & Strategies in Revision of MSU IP Policy

<p>Goals</p> <ul style="list-style-type: none"> • Increase clarity; reduce ambiguity • Make more "faculty and staff friendly" • Stimulate creative work across the University • Align policy with capability to enforce 	<p>Strategies</p> <ul style="list-style-type: none"> • Include definitions and background material • Increase "monetary sharing" with faculty and staff • Include numerous specific examples of application – Q & A
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6 MAGS Annual Meeting 4/22/2010

IP Components & Policies

- **Creation of IP by faculty, staff, students**
 - Patentable inventions
 - Copyright-protected works
- **Use of copyright-protected works created by faculty, staff, students**

IP Scope of Considerations

1. **Broad View** = inventions, discoveries, know-how, show-how, processes, unique materials, copyrightable works, creative or artistic works which have potential value.
2. **Patentable** = a process, machine, manufactured object, composition of matter, or new use or improvement of these.
 - Includes some software-related inventions, biological substances where there has been human intervention, isolated DNA, unique chemistries
 - Must be useful, novel, not obvious, and supported by adequate evidence

IP Scope of Considerations

3. **Copyrightable** = certain original works including written works, software, and selected audio, visual, or performed compositions.
 - Addresses the form of expression, rather than the content.
 - Examples include class notes, books, theses, educational software, articles, nonfiction and fiction, poems; musical, dramatic, choreographic, or sculptural works; and other works of artistic imagination.

Policies: Patent vs. Copyright

- **University policies on these two are typically not identical, but companion policies due to their differences in legal and academic considerations**
- **Patent is a grant of property right by a government for a limited period of time**
 - The inventor must request patent protection
 - Patent rights do not follow automatically from the creation
- **Copyright protection exists from the time an original work is created and vests immediately when the work is fixed in a tangible medium for the first time**

Creator

- **Creator is distinctive from ownership**
- **Creator refers to an individual or group of individuals who make, conceive, reduce to practice, author or otherwise make a substantive intellectual contribution to the creation of IP**
- **Includes INVENTOR in patent law and AUTHOR in the U.S. Copyright Act**

University IP Policies Vary According to the Goals Envisioned

- **They can be an incentive, or disincentive, to stimulate faculty creativity**
 - **They can be part of the toolbox to build University prestige**
 - **The strategy can be to enhance revenue for the University**
- OR
- **Goals are some combination of the above**

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IP Policy Decisions: I

- **Balance between rights of creator and rights of the University**
 - Stimulation vs. Control
 - Employee vs. Employer rights
 - Differences in relationship with the University: faculty; staff; students; post-doctorates
 - Protection of creator vs. who is responsibility

13 MAGS Annual Meeting 4/22/2010

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IP Policy Decisions: I

Continued

- **Who is the creator?**
 - Questions of joint ownership
 - Evaluation of faculty rights and student rights
- **Assignment of ownership, and thus potential profit**
 - Obligations arising from external funding
 - Rights of University affiliates

14 MAGS Annual Meeting 4/22/2010

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IP Policy Decisions: II

- **Criteria for ownership, including treatment of various kinds of University resources**
 - "Usually and customarily provided" OR Substantial Use vs. Not Substantial Use
 - Timing and location of creation; creative work
- **Who pays for what?**
- **Formula for distribution of royalties**
- **Processes for resolving difference in positions; grievance issues**

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IP Policy Decisions: III

- **What is enforceable and what may not be worth the time?**
- **Will there be units or activities that are exceptions to the main University policy?**

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Making a Decision to Patent

Approaches to the Question:

- **Internal evaluation within the University** (Input from Research Officer, Grad Dean, Faculty Expertise, Money source, etc.)
- **Patent attorney specialists** (expensive)
- **Technology Evaluation agreement with another University with this capacity**
 - Technology Quick Scan
 - Market Analysis
 - In-depth Evaluation

17 MAGS Annual Meeting 4/22/2010

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Ownership of Patents

MSU Current and Anticipated Future Policy

- **The University assumes ownership of patents and qualifying inventions made by its employees; and in limited cases by students and institutional visitors**
 - Assumes inventions made in course of their employment and in a discipline related to the inventors employment, *and/or*
 - Inventions by employees or students enabled by significant use of University resources
- **The University may waive its rights to the invention, allowing the inventor to patent independently**
- **MSU has a separate IP policy for one of its Centers**

18 MAGS Annual Meeting 4/22/2010

Exception to the Missouri State University IP Policy

- Research conducted at the Jordan Valley Innovation Center of MSU in collaboration with businesses
- At the discretion of the University President, these businesses may be assigned IP ownership rights providing such assignments are consistent with applicable laws and regulations of external organizations sponsoring these collaborative projects.

Distributable Revenue: MSU

- Application to University-owned patent or copyright
- Distributable Income = Gross University earnings *minus* "Out-of-pocket" expense *minus* required payments to others (a net revenue concept)

Distributable Income: MSU

Option 1: MSU Current

- Distribute all net dollars
 - 40% University share
 - 40% Creator's share
 - 20% Dept/Unit of creator

Option 2: Proposed

- Distribute first \$50,000 of net to creator
- Distribute additional \$
 - 40% University share
 - 40% Creator's share
 - 20% Dept/Unit of creator

Patent Case Example 1

- Working in her Chemistry Lab, 'Faculty Member A' develops a synthesis protocol with industrial application potential. The University invests \$16K in gaining a patent.
 - University assumes ownership of the patent.
 - 'Faculty Member A' is the inventor
 - 'Company Z' negotiates with the University for an exclusive license, agreeing to \$5K annually or 3% of the net profit from product sales, whichever is greater.
- Question: How will any income be distributed?

Patent Case 1: Income Distribution

Assume Option 2

YEAR 1: After license to 'Company Z', no product developed, but Z pays \$5K. All \$5K is retained by the University

YEAR 2: 'Company Z' produces product and makes royalty payment of \$25K to the University. The University retains \$11K to recoup the initial investment on patent filing. Remaining \$14 K is distributed to 'Faculty Member A'

YEAR 3: 'Company Z' pays the University \$70K. 'Faculty Member A' receives the first \$36K; the remaining \$34K is distributed 40:40:20

Patent Case 1 Revisited: Recouping Out-of-Pocket Expense

The Chemistry Synthesis protocol

- History: Chemistry 'Faculty Member A' had received a \$7500 internal faculty research grant that went for consumable supplies that assisted in developing the patented protocol.
- Question: Will the \$7500 be subject to be recovered from gross patent revenues before distributable income?
- Answer depends on the decision made in formulating policy.

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University Expenses to Recoup

- **Question:** *How will the funds provided for research on an internal faculty grant be treated ?*

Option 1: MSU Current Option 2: Proposed

- Internal faculty grant funds used to support development of a creative work are a University expense subject to being claimed if gross revenues result from the creative product.
- Internal faculty grant funds awarded by a competitive application process are a University expense subject to recovery.
- This funding process is open to all faculty. The grant might not have resulted in revenue.

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Patent Case Example 2: Staff Invention Outside of the University

Design of a Spray Nozzle

- **'Staff Member F' is employed by the University to fabricate medical devices. Working in his garage on Saturday, 'Staff Member F' invents a unique spray head that has the potential use for efficient pesticide applications.**
- **Ownership? 'Staff Member F' is free to seek a patent on his own. The University may not claim ownership.**

26 MAGS Annual Meeting 4/22/2010

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Patent Case Example 3: Graduate Student Invention

Student Invention in the Lab

- **Working on her thesis in her advisers lab and with the regular mentoring of her advisor, 'Student X' invents a novel method for the manufacture of a pharmaceutical agent.**
- **Inventor & Ownership? Its disclosure reveals significant use of University resources. Both 'Student X' and her advisor are listed as inventors, given the significant input from the advisor. The University owns the patent.**

27 MAGS Annual Meeting 4/22/2010

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Copyright Ownership

- **Consistent with academic tradition and the University's desire to encourage dissemination of the results of scholarship and research, in most cases individual creators of copyrightable works of scholarship, research, or pedagogy, and original works of art and literature, will hold personal copyright.**
- **University may have ownership in certain situations: works created in administrative duties; works created under terms of a contract or agreement; those with significant use of resources; works of a team of faculty staff and students where it is difficult and impractical to determine contributions over time, etc.**

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Customarily Provided – Not a Significant Use of University Resources

- **Salary**
- **Developmental Assignment or Awards competitively made**
 - Sabbatical Leaves
 - Summer Fellowships
 - MSU Faculty Research Grants
- **Assigned offices or laboratory**
- **Computers**
- **Library Resources**
- **Computers**
- **Communications technology**
- **Secretarial services**
- **Software or hardware including University media production facilities**

29 MAGS Annual Meeting 4/22/2010

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Significant Use of University Resources

- **Substantial funds received by the University through an external grant or contract**
- **Use of funds allocated from internal discretionary pools**
- **Receiving assistance from support staff outside the creator's unit when that assistance is more than what is normally provided to other faculty**
- **Shared research equipment and facilities**

30 MAGS Annual Meeting 4/22/2010

Disclosure of Copyrightable Works

- **Personal Ownership.** These copyright works need not be disclosed.
- **Potential University Ownership.** The creator of a work in which the University may have an ownership interest shall disclose the work promptly. This is especially urgent if a third party may have a contractual basis for asserting a right to use the work (such as a sponsored research agreement). Relevant information will be used for an assessment and determination of ownership. (There is a process outlined!)

Copyright Case Example 1: Creative Work in Song and CD

Writing and Distribution of Music

- **Scenario:** Music 'Faculty Member C' writes several songs which she proceeds to record on Compact Disc and subsequently markets. In the preparation of the CD, 'Faculty Member C' sought University help and received a \$4K grant for the specific purpose of funding studio time and the associated equipment rental for making the CD.
- **Copyright:** 'Faculty Member C' has authorship
- **CD Ownership:** The University may determine that it has rights by assignment of ownership in the CD

Copyright Case 1: Royalties

- **CD Sales:** The CD is marketed and becomes a solid hit, returning \$60K in royalties in the first year. If the University has determined a right of ownership, the first call on royalty income would be \$4K to recoup external investment costs.
- **Income Distribution:** After \$4K is retained by the University, the next \$50K goes to the author (MSU proposed IP Policy). Dollars thereafter are split 40:40:20

Copyright Case Example 2: External Funding Control

Teaching materials from contract

Situation: 'Faculty Member K' is the PI on an institutional contract with an agency of the state. The contract is for creation of teaching materials for the on-the-job training of social workers employed by state government. Terms of the contract are that the state has the option to license to other government levels.

Answers: 'Faculty Member K' has the obligation to assign ownership to the institution so the University may meet the contractual requirement to offer the grantee their right to distribute the work.

Copyright and Thesis Issues

The Problem

- Generally a thesis or other written research product has intellectual property ownership with the student. (i.e. Student hold copyright)
- However, in some disciplines and situations the faculty mentor has a major investment in the work, and co-publication of an article is common.

The Challenge

- Crafting language in a copyright policy that assures a faculty member (or others) who contributed substantially is not excluded from opportunity to co-author a potential publication.
- Part of the resolution to this issue is outside of an IP policy.

Copyright Case Example 3: Thesis Developed by a Graduate Research Assistant

Graduate Student and University Collaboration

- **Scenario:** 'Master's Student D' writes a thesis while serving as a University research assistant working on the topic.
- **Copyright:** 'Master's Student D' owns the copyright in the thesis since it is an academic requirement, but the supervising University faculty member has the research product. If published in a scholarly journal, joint authorship may occur.

Development of Online Learning

The Questions

- Copyright ownership?
- License to use?
- Freedom to market the product?

Rationale for Questions

- University has often subsidized beyond the "normal" – equip, instructional designers, etc.

Option 1

- Author has property rights, but...
- University has unrestricted license for use for a period of time

Option 2

- Consider online materials as any other class-developed medium

37

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4/22/2010

Copyright Case Example 4: The Evolving Online Reality

Creation of an Online Module

- **Situation:** 'Faculty Member R' creates a learning module while teaching an online course that she later sells (or proposes to sell) to an online textbook publisher.
- **MSU Proposed Outcome:** 'Faculty Member R' owns the copyright on the module and rights to profits, but the University retains a license to use the module.

38

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4/22/2010

Administration of an IP Policy

Considerations

- What institutional official has primary oversight?
- How are faculty and/or staff involved with concerns? And manner of selection?
- Procedures for reporting IP?
- Procedures for resolving differences in perspective?

Example

- Institutional oversight by the Assoc. Provost for Graduate Studies and Research.
- Standing IP Advisory Committee with sub-committees for patent and copyright (appointed by administration).
 - Advises on feasibility of patents
 - Resolves disputes
 - Suggests policy revisions

39

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4/22/2010

Substance and Adoption of the Intellectual Property Policy?

- **Central Administration and Governing Boards generally initiate IP Policy development And of coursehave ultimate say in substance**
- **Committee often develops with legal counsel involved**
- **MSU: The current policy was discussed by the Faculty Senate; was eventually approved by the Senate. It did not go before the Staff Senate.**
- **MSU: Current Revision – will be going for review by the Faculty Senate**

40

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4/22/2010