Student Intellectual Property, Technology Transfer and Commercialization Guide PASSHE

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Students acting as employees (i.e. exception # 4 above) are covered by the requirements that are applicable to other University employees and outlined in the "**Technology Transfer &**

from the University, or collaborating with faculty or participating in a "special situation" in a for-credit course, then the Intellectual Property belongs to the University and the student must sign a **Student Intellectual Property Agreement with the University** (Form 1).

f) What about summer students or student interns, both at a PASSHE University and at other institutions?

Summer students and student interns at the PASSHE UNIVERSITY and PASSHE students at other institutions must abide by the policies of the host institutions, including signing any appropriate Intellectual Property agreement for the host institution.

g) What about artistic works created by students?

Artistic work, including poetry, sculpture, graphic arts, painting, etc., created as part of academic required coursework, all rights rest with the creator. When there is some specific agreement/contract which designates the students' effort as a "work for hire", the Intellectual Property belongs to the University or to a sponsor.

h)

and student to move forward, privately without University support for patent costs. Another option in this case is for the faculty to voluntarily assign ownership to the University so that the University may submit the invention disclosure to the TTO for evaluation.

Forms are available to deal with all of the situations requiring assignment, or notification of the sponsors of the research. More detailed guidance is contained as a preamble to the forms on the following pages.

Faculty members have the responsibility to collect the appropriate Intellectual Property agreement signed by the student at the first meeting of the project or course.

Frequently Asked Questions

Intellectual Property and Students

What are my rights and responsibilities as a student regarding Intellectual Property? As a faculty member what do I need to know about student Intellectual Property rights?

Generally, undergraduate and graduate students, **who are not employed by the University** own any Intellectual Property that they create through enrollment in courses for academic credit. There are three exceptions:

1) When there is collaboration between a student and University faculty or staff to create works as part of research or development activities, Intellectual Property will be owned by the University.

2) When the student receives material support beyond the standard level provided by the University to students, including non-credit work, Intellectual Property will be owned by the University.

3) Special Situations may occur in certain courses or special projects where students are presented with the opportunity to participate in projects or activities in which the ownership of any resulting Intellectual Property must be assigned either to the University or to a sponsoring entity as a condition of the student's participation. **Special Student Intellectual Property Agreement Forms** are available to deal with all of the situations requiring assignment, or notification of the sponsors of the research.

Students employed by the University in a capacity that could conceivably lead to a patent are required to sign an Intellectual Property Agreement as are other employees. Intellectual Property will be owned by the University, and will be subject to University policies and procedures governing Intellectual Property and patents. See the "**Technology Transfer & Commercialization Guide for PASSHE Non-Faculty Personnel.**"

What about publishing?

Any public disclosure, such as a publication, presentation, thesis and thesis defense, has an impact on patenting. By keeping the University's Authorized Official well informed of upcoming public disclosures, the University can formulate an appropriate patent strategy that minimally impacts publications and presentations. Students retain the right to publish and present, unless limited by sponsorship agreements. Institutions' and academic programs' respective policies /guidelines for completion of theses and dissertations should address how public defense, open presentation, and publication of theses and dissertations will be reconciled

with the need to safeguard against risk of disclosure or loss of protection of patentable concepts and materials.

How can a student Inventor benefit from transferring ownership to the University?

When the University receives an assignment of ownership from an Inventor, the University can take steps to file for patent protection of the invention, paying all the filing and legal costs of doing so. Initial legal costs can range from \$8,000 to \$15,000. Total costs can range up to \$25,000. The Universities have access to attorneys who specialize in patent law. The University can also provide the services of experienced Technology Licensing Officers who assess the invention for its commercial potential, as described below, and seek out businesses, both regionally and nationally, that may buy licenses to use the invention, thus generating income for both the Inventor and the University. The University can take future legal action to ensure no one uses the patented invention without permission and otherwise protects the value of the invention. Patents require payment of annual maintenance fees, which the University will assume. The Technology Licensing Officers monitor all licensing agreements to ensure license fee payments are consistent with agreements and actual product sales or profitability. License agreements signed by the University will typically allow access to examine the licensee's financial records to ensure the product's sales and profitability are properly represented to the University and the Inventor.

After assignment, an Inventor can remain an active participant in commercialization efforts, as the Technology Licensing Officers will follow-up on all leads provided by the Inventor. It is possible that the Faculty can do additional research for the licensees under sponsored research agreements.

In summary, an inventor can only realize income from their invention if it is properly protected through the filing and issuance of a patent, and if it is successfully marketed to business. All revenues are shared with the inventors. These services are provided by the University at no cost to the Inventor, **when** the invention is assigned to the University.

What if I, as a student, feel my faculty advisor has a conflict of interest in requesting assignments from me and my classmates?

In the event of a conflict with a faculty advisor, a student should consult with the designated University Authorized Official.

The University makes grant awards to students who apply for research funding. The awards are small ~\$500. The recipient students receive funding, use lab space and use faculty's time. Is this a level of resources not normally available or would it be considered normally available since anyone can apply?

Yes, this is an example of material support beyond the standard because it is a grant that very few students receive and because the students work closely with faculty in a way not normally available to all students.

What are the PASSHE's official policies on Intellectual Property?

The relevant PASSHE policies are

- 1. "Student Intellectual Property, Technology Transfer and Commercialization Guide", which covers students' academic work;
- 2. "Technology Transfer & Commercialization Guide for PASSHE non-Faculty Personnel" which covers students' (and other personnel) intellectual property created during their employment with the University, and
- 3. "Technology Transfer & Commercialization Guide for PASSHE Faculty".

Refer to Intellectual Property Guide for PASSHE Faculty, non-Faculty Employees and Students, <u>Frequently Asked Questions</u> for more information.

DEFINITIONS

PASSHE Student Intellectual Property Rights

Collaboration with faculty or staff

A student and faculty working together that goes beyond the standard for an undergraduate or graduate student at a PASSHE University. The term must be defined in comparison to the ususal level of support provided to all students within a department or discipline. The definition may vary from one discipline to another. The determination must be made by the department or division head, subject to the affirmation of the dean. Collaboration may take to the form of a student assisting faculty with research or creative activities. It may take the form of students and faculty working together_to develop an exhibit or production of works of art, outside of for-credit courses. It does **not** include independent study courses taken for credit. It does **not** include work for pay or other compensation under the guidance of a faculty or staff person. Should a question arise about whether collaboration is beyond the standard, a written statement will be obtained from the unit leader (department or division head, dean, director, etc.) concerning the level of collaboration.

Creator – See Inventor

Dissertation

A dissertation is an extended written treatise, in which the doctoral student exposits original research results and interpretations. The dissertation is an essay that demonstrates excellence in scholarly ability, intellectual acuity, and erudition. The dissertation stands as the culmination of the degree of Doctor of Philosophy (Ph.D.), Doctor of Education (D.Ed.), or Doctor of Psychology in Clinical Psychology (Psy.D.). A dissertation is required of all doctoral candidates and must demonstrate the candidate's mastery of his/her research and reflect the results of an original investigation in the principal field of study. The goal should be to make a definite original contribution to knowledge in the field.

To qualify as a thesis or dissertation, the document typically

- Must be demonstrably original work.
- Must be the student's own work.
- Must never have been previously submitted for college credit or used for any other academic purpose.
- Must never have been published in its entirety (including on the Internet).
- Must demonstrate mastery of written, standard American English.
- The topic must be sufficiently important to be approved by the thesis/dissertation committee, the methodology must be efficacious and acceptable to the same committee.

Graduate Thesis

A graduate thesis is a scholarly piece of writing in which the a graduate student is expected to show a command of the relevant scholarship in his/her field and contribute to that scholarship. It should confront an unresolved question and present a resolution. The thesis stands as the culmination of a research master's or clinical doctoral¹ degree.

Independent Study

An independent study is a course of study, for credit, designed by a graduate or undergraduate student and a sponsoring faculty member. The student works independently on the project and material throughout the term, consulting with the faculty member on a periodic basis.

Inventor

An inventor is one who conceives and either personally or through someone else reduces the invention to practice. The conception of an invention is complete if the inventor is able to make a disclosure that would enable someone skilled in the art to make the invention without extensive research or experimentation. Someone who constructs the invention based on the inventor's conception or who merely assists in the reduction to practice of an invention is not an inventor. Failure to name the correct inventors can result in invalidation of a patent. It is the obligation of all inventors to adequately document their inventive contributions in laboratory notebooks or similar documentation. Inventorship is distinct from authorship and ownership.

Invention and Patentable Invention

An invention is the physical embodiment of a discovery. It is any technical contribution, discovery, process, method, use, design, improvement, modification or combinations thereof, conceived of and reduced to practice. Includes computer software, novel machines, devices, compositions of matter (compounds, mixtures, genetically engineered cells, plants or animals), genetic forms, mask works, production processes, production methods, plant varieties, etc. that did not exist before.

For an invention to qualify for a U.S. patent it must be novel, non-obvious, and useful. It can be: a device, a manufacturable article, a machine, a composition of matter, a process or method, or a new, useful improvement.

Material Support for Student Academic Research

Material support for student academic research will mean that for the project that produced the Intellectual Property the creator received staff, salary or facility support beyond the standard

¹ As of October 2007, a clinical doctoral degree refers to these programs: Clinical Doctor of Audiology (Aud.D.) and Doctor of Physical Therapy (DPT).

resources provided to a student in the University. The term must be defined in comparison to the usual level of support provided to all students within a department or discipline. The definition may vary from one discipline to another. The determination must be made by the department or division head, subject to the affirmation of the dean. Should a question arise about whether support is beyond the standard, a written statement will be obtained from the unit leader (department or division head, dean, director, etc.) concerning the level of use of PASSHE University support and facilities.

Other Covered Individuals

Individuals who are required to sign the employee's Intellectual Property Agreements, but are not employees or students of the University are considered "Other Covered Individuals." This includes emeritus/retired faculty, visiting scholars/scientists, contract employees, consultants and others engaged in research at the University who are not employees or students.

Special Situations.

Projects or activities that are part of a for-credit course where students are presented with the opportunity to participate, in which the ownership of any resulting Intellectual Property must be assigned either to the University or to a sponsoring entity (such as a company) as a condition of the student's participation.

Sponsored Research or Sponsored Project

Includes research and creative activities or service projects funded by Federal and non-Federal agencies and organizations.

University employee or University personnel

Includes paid or otherwise compensated undergraduate and graduate students. Students who

The student's grade and/or evaluation of performance in the course will not be affected by the student's decision to participate or not to participate in projects or activities requiring the assignment of the student's Intellectual Property.

Students should understand that the assignment of Intellectual Property is a binding legal agreement and that they have the right to seek independent legal advice at their own expense prior to signing this agreement.

When a sponsor uses student research resu

The sponsor is required to sign the **Student Research Sponsorship Acknowledgement (Form 3)**.

Faculty are required to collect Form 1 or Form 2 and 3 at the first m 2 a

Student Intellectual Property Agreement with the University

(For Use When Assigning Intellectual Property to the <u>(insert name)</u> University of Pennsylvania under the exceptions #1, #2 and #3 to academic work. Not for use by employed students.)

Set forth below are my rights and responsibilities regarding Intellectual Property I create as a student at ______ University of Pennsylvania.

General Rule. Any Intellectual Property (such as undergraduate theses, graduate theses or dissertations, inventions, discoveries, creations and new technologies) conceived or first reduced to practice by a student at the (<u>insert PASSHE university name</u>) University of Pennsylvania ("University") as a work product (including homework assignments, laboratory experiments, special and independent study projects) of a "*for credit*" course will be owned by the student, with three exceptions. Those exceptions are:

1. when the student collaborates with faculty or staff to create works as part of research or development activities, also including non-credit, unpaid work.

2. when the student receives material support beyond the standard level provided by the University to students, also including non-credit activity.

3. in certain courses or special projects where students are presented with the opportunity to participate in projects or activities in which the ownership of any resulting Intellectual Property must be assigned either to the University or to a sponsoring entity as a condition of the student's participation.

In the above exceptions, the University will own the Intellectual Property. This form is to be signed and collected by the faculty advisor/instructor at the start of any project or activity that qualifies for the above exemptions.

Special Situations.(Exception #3) Situations may occur in certain courses where students are presented with the opportunity to participate on projects or activities in which the ownership of any resulting Intellectual Property must be assigned either to the University or to a sponsoring entity (such as a company) as a condition of the student's participation. Students are never obligated to participate in projects or activities that require the assignment of the student's Intellectual Property to the University or to another entity. In these situations, students will always be presented with two options: 1) to participate in alternative projects or activities that do not require the student to assign their Intellectual Property or 2) to participate in projects or activities that require the student to assign their Intellectual Property.

The student's grade and/or evaluation of performance in the course will not be affected by the student's decision to participate or not to participate in projects or activities requiring the assignment of the student's Intellectual Property.

Students should understand that the assignment of Intellectual Property is a binding legal agreement and that they have the right to seek independent legal advice at their own expense prior to signing this agreement.

<u>Assignment of Rights</u>. I agree as a condition of my participation in [identification/description of project/activity requiring the assignment of Intellectual Property] in [course number] to assign to University all rights that I may acquire in inventions, discoveries or rights of patent that are conceived or first actually reduced to practice by me as a result of my participation. I agree to inform University of any Intellectual Property that I may develop and to cooperate with the University, at University's expense, to

obtain a patent or patents upon any invention or discovery conceived or first reduced to practice by me. Co-operation includes but is not limited to maintaining and providing appropriate lab notes, work logs and other documentation of my research.

<u>Right to Receive Royalties</u>. I understand that if I assign my Intellectual Property rights to the University, then the University will manage the Intellectual Property under current University policy and will share resulting royalties, if any, with me in accordance with University policy as it applies to Intellectual Property created by University employees. The University shall be solely responsible for patenting and commercialization of the Intellectual Property, consistent with University and PASSHE policy, as may be amended from time to time, and shall have sole right and responsibility to determine the extent of United States and foreign patent prosecution, maintenance, enforcement and defense relating to the Intellectual Property. The University is under no obligation to use other than reasonable efforts currently in practice in the future marketing or licensing of the Intellectual Property.

<u>Cooperation with Patenting Process</u>. I agree to make myself available to patent attorneys, to sign all papers, take all rightful oaths, and perform all acts that may be necessary, desirable or convenient for fulfilling this assignment and for securing and maintaining patents the University, its successors, assigns and legal representatives. I understand that my responsibilities under this agreement will continue after completion of the project, activity, course and my association with the University.

Student

This agreement is effective upon the latest date of signature.

A parent or legal guardian signature is required for students younger than 18 years of age:

Parent/Legal Guardian Date
_____ University of Pennsylvania
By: _____

Бу.____

Name: _____

Title:

(Printed Name)

Date

Student Name

Date:

ACKNOWLEDGED: Course Instructor/Project Supervisor

Name

Date

(Printed Name)

This form is to be signed and collected by the faculty advisor/instructor at the start of any project or activity that qualifies. The faculty advisor/instructor should forward to the University Authorized Official.

If a student believes the faculty advisor has a conflict of interest in implementing these procedures the student should consult with the University Authorized Official.

Form 2

Student Intellectual Property Agreement with a Company Sponsor

(For Use When Assigning Intellectual Property to Company Sponsor for Special Situations)

Set forth below are my rights and responsibilities regarding Intellectual Property I create as a student at ______ University of Pennsylvania.

Special Situations. Situations may occur in certain courses where students are presented with the opportunity to participate on projects or activities in which the ownership of any resulting Intellectual Property must be assigned either to the University or to a s I6iti6(6itin 51120.52 /r[vities in)n9(te6(n)97(ta s)6)2T-7(i2

representatives. I understand that my responsibilities under this agreement will continue after completion of the project, activity and course.

This agreement is effective upon the latest date of signature.

A parent or legal guardian signature is required for students younger than 18 years of age:

Parent/Legal Guardian

Date

Form 3

STUDENT RESEARCH SPONSORSHIP ACKNOWLEDGEMENT

Thank you for your interest in sponsoring student research in connection with [Class Title and Semester Date]. As a result of your sponsorship and involvement, [graduate and/or undergraduate] students at ______ University of Pennsylvania (the "University"),

Please acknowledge your receipt and acceptance of these terms by executing this form and returning a copy to the following address: **[supervising faculty contact or administrative contact information].**

Sponsor:

By:

Name:

Title:

Date:

Date: