

INVENTORS' GUIDE



**BILL L. HARBERT INSTITUTE
FOR INNOVATION AND ENTREPRENEURSHIP**

The University of Alabama at Birmingham

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OVERVIEW

What is technology transfer?

Technology transfer, sometimes referred to as technology commercialization, involves creating business relationships between research institutions and commercial entities in order to develop products from discoveries, inventions or know how generated at those research institutions. The Harbert Institute for Innovation and Entrepreneurship (HIIE) helps facilitate those relationships, which often result in licensing agreements that grant to the commercial entity the rights to develop those technologies.

What is the benefit of participating in the technology commercialization process?

Successful technology commercialization has ripple effects and benefits that spread from the inventor outward. The inventor's success may lead to increased funding for their laboratories and to increased attention and funding to the department and school. That could result in increased awareness, campus-wide, for licensing processes, which helps establish a culture of entrepreneurship. The university will benefit as these factors help faculty recruitment and retention and, in addition, the licensing revenues brought in by commercialization.

Perhaps most notably, successful technology commercialization leads to the development of medical, healthcare and technology solutions, offering a chance for UAB's talented researchers to see their work used to change lives for the better, and strengthens Birmingham's ecosystem for technology commercialization and entrepreneurship.

- Creation of a culture of entrepreneurship, which benefits faculty recruitment and retention; and
- Development of medical, healthcare and technology solutions.

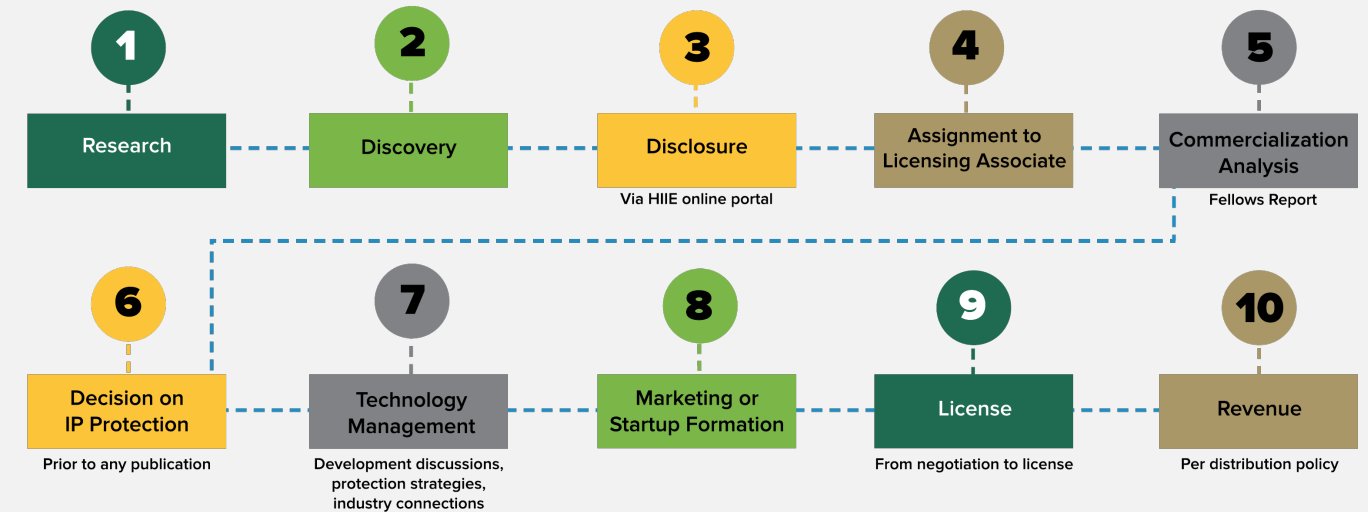
What is the HIIE, and how does it help further successful technology commercialization at UAB?

HIIE serves as UAB's hub for innovations developed by all UAB faculty and staff. The HIIE team works to advance UAB research and innovations toward the marketplace, giving those innovations the chance to directly impact our world. The team takes responsibility for appropriately protecting and subsequently licensing those innovations. We do so by guiding inventors through UAB's internal processes for disclosing and commercializing intellectual property.

To reiterate, there are many potential benefits to successful technology commercialization, including but not limited to:

- Research funding for investigators and their labs;
- Licensing revenues and/or equity value;
- Reinvestment in the local economic ecosystem;
- An increase in campus-wide interest in applied research, and patenting and licensing processes;

Commercialization Workflow



For a more in-depth look at the commercialization workflow, see the graphic on this page.

The HIIE also guides budding scientist entrepreneurs interested in commercializing inventions through the start-up formation process. Those interested should reference [the UAB Start-Up Guide](#). We can also assist inventors and entrepreneurs with making essential connections within the

Birmingham community for accessing advice and capital.

So what about The UAB Research Foundation?

The UAB Research Foundation is the legal entity through which the Harbert Institute for Innovation and Entrepreneurship owns UAB-developed intellectual property and enters into contracts related to technology commercialization.

INVENTION DISCLOSURES



What is an invention disclosure?

An invention disclosure is a formal written description of an invention provided to HIIIE.

Instructions on how to submit a disclosure are available at uab.edu/innovation/disclose.

The disclosure initiates the process for the HIIIE team to evaluate the invention with the help of our [Innovate Fellows](#) and, in partnership with the inventors, make decisions on the best approach to marketing and commercialization.

Why submit a disclosure?

When faculty, staff and students disclose potential intellectual property, the benefits to the institution and to the surrounding

community are multifold.

If UAB is seen and acknowledged as a cradle of innovation and invention, it can and will lead to more research funding and will further UAB's advancement into the top tier of academic research institutions.

In addition, there is also a professional obligation to disclose potential IP. UAB Patent Policy requires all faculty members, university employees, and students, as a condition of their employment and/or enrollment, to report any invention or discovery which they have conceived or developed, or which has been conceived or developed under their direction, during their employment or enrollment.

Even if you believe that you are not required to assign (i.e., to transfer ownership of) the invention or discovery to the HIIIE, you still must disclose it to the HIIIE.

Once the invention or discovery is disclosed to the HIIIE, a determination will be made as to whether the invention or discovery meets the criteria for assignment per university requirements.

Will I be able to publish the results of my research and still protect the commercial value of my intellectual property?

Invention disclosures to our office should happen well before presenting the invention through publications, abstracts, posters, conferences, press releases or other forms of communication.

For patentable inventions, presenting them or publishing them in any form before filing for patent protection significantly reduces the possibility of maximum societal impact by barring the university from seeking patent protection in many jurisdictions (which can disincentivize companies from further investing in the technology as needed to enable the technology to actually reach the market).

However, publishing after filing for patent protection is fully encouraged. The HIIIE team is committed to ensuring that inventors can publish their discoveries as soon as possible.

Please don't hesitate to contact the HIIIE at innovation@uab.edu with any questions or concerns you might have.

PATENTS

What is a patent?

An issued patent conveys the right to the owner of the patent to exclude others from making, using, selling, offering to sell, and importing the patented invention. The patent must be actively defended or enforced by the patent owner.

What can be patented?

Processes, machines (such as devices), compositions of matter, articles, some software, and specific methods can all be patented.

Who is an inventor on a patent?

Under U.S. law, an inventor takes part in the creation of the invention claimed in the patent application. A person who only

gives funds to build an invention or is an assistant following specific directions is not generally considered an inventor. A registered patent attorney will determine appropriate inventors.

What is the patenting process?

Patent applications are drafted by patent attorneys that the HIIE hires and reviewed by inventors and licensing associates. When an application is filed, inventors are asked to sign documents confirming that the inventions and any resulting patents have been assigned to the UAB Research Foundation. Patent applications can be filed in the United States and/or in other countries.

An **issued patent** conveys the right to the owner of the patent to exclude others from making, using, selling, offering to sell, and importing the patented invention.

What is a provisional patent application?

A provisional application reserves, for 12 months, the applicant's right to file a more detailed non-provisional application. Since a patent may only be issued to the first inventor to file an application (or the first applicant to file on the inventor's behalf), a provisional patent application can be used to secure a priority filing date for a patent application before disclosure (via publications, etc.) of the invention.

Is the patenting process the same for foreign countries?

The process typically works in a

similar fashion to the United States. However, in almost all other countries, an inventor will lose any patent rights if the invention is publicly disclosed prior to filing the patent application. In the United States, there is a one-year grace period.

What is the timeline of the patenting process?

The average time required to obtain a patent is 3-5 years, although some fields such as biotechnology may have a longer wait time. It may take some back-and-forth with the United States Patent and Trademark Office (USPTO) before a patent is

granted/issued. Once issued, it is generally enforceable in the United States for 20 years from the initial filing of the non-provisional patent application. Contact HIIE at innovation@uab.edu for specific information pertaining to your invention.

Can a patent application be enforced?

No. Only a validly issued patent can be enforced.

Who decides what gets protected?

HIIE makes the final decision, in consultation with the inventor and any joint owners, if applicable. Not all inventions are patentable or justify the significant time, expense, and effort required to seek patent protection. The HIIE team will review both the patentability and commercial potential of an invention before starting the patent process.

What if I created the invention with someone from another institution or company?

The HIIE licensing associate will need to determine ownership and other rights as well as next steps. If the technology is jointly owned with another academic institution, UAB may enter into an Inter-Institutional Agreement that will allow one of the institutions to take the lead in protecting the invention. The agreement usually also provides for sharing of expenses associated with the patenting process and allocating any licensing revenues.

What are research materials?

Research materials are unique materials that are owned by and created at UAB. Most often, this refers to biological materials such as animal models, antibodies, cell lines, plasmids and vectors. It may also refer to chemical compounds. Research materials are sometimes patent-eligible. Contact HIIE at innovation@uab.edu with specific questions.



PATENT POLICY

Where can I find the current UAB Patent Policy?

The up-to-date UAB Patent Policy can be accessed at tinyurl.com/UABPatentPolicy.

What inventions are covered by the UAB Patent Policy?

Any invention or discovery which is:

- The result of research carried on by or under the direction of a UAB employee and/or having costs paid from funds provided by, under the control of, or administered by UAB,
- Made by a UAB employee and which relates to the employee's field of work, or
- Developed in whole or in part by using UAB resources or facilities,

is the property of the University of Alabama at Birmingham, not of the individual inventor. As a [condition of employment or enrollment](#), faculty members, employees and students agree to disclose any invention or discovery conceived, discovered, developed and/or reduced to practice at any time following their initial employment or enrollment. Such inventions or discoveries are disclosed to the Harbert Institute for Innovation and Entrepreneurship at uab.edu/innovation/disclose.

What inventions aren't covered by UAB's Patent Policy?

If the HIIE team determines that an invention was not developed with UAB resources or in connection with a faculty or staff member's employment, the HIIE

will not claim ownership of the invention.

What about student inventions?

Student inventions are governed by the UAB Patent Policy, but as a general matter, inventions created by students are much less likely to qualify under the categories of inventions that the university would own. However, student inventions that result from research that is carried out by the student under the direction of a UAB employee or that are developed in whole or in part through use of UAB resources would be owned by the university. If you have questions about specific circumstances surrounding your invention, please contact the HIIE at innovation@uab.edu.

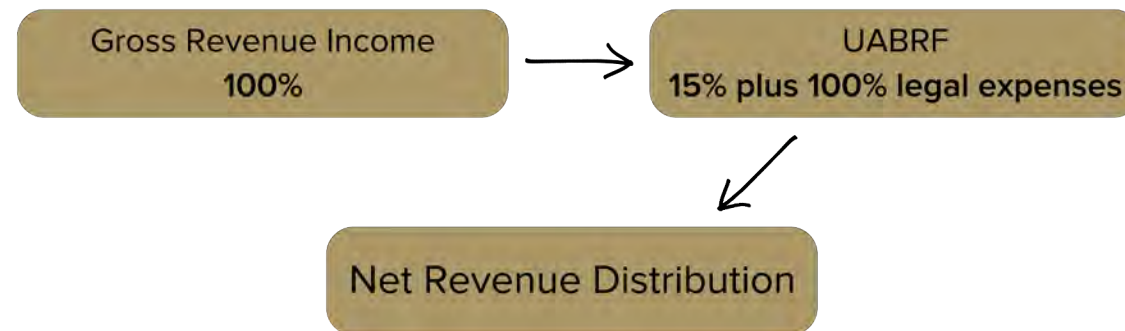
How are UAB-owned inventions licensed to others to use?

The agreement for allowing commercial use of a UAB-owned invention by a company outside of UAB is a “license.” If UAB grants a license, the company can develop and sell products based on the invention. HIIE will typically keep the inventor(s) informed during the licensing process, but licensing negotiations are independently managed by HIIE. For more on licenses, see the “Agreements & Contracts” section of this guide.

How are license revenues distributed?

License revenues are distributed according to the Patent Policy. Revenues from license fees, royalties and equity will be shared with inventors according to a pre-existing formula as described in the graphic on page 13.

UAB Revenue Distribution Summary



Cumulative Revenue Income	Inventors	Affiliated Departments	Affiliated Schools	UABRF
Up to \$20,000	75%	6.25%	3.125%	15.625%
From \$20k-\$100k	50%	12.50%	6.25%	31.25%
From \$100k-\$2m	30%	17.50%	8.75%	43.75%
\$2m and up	30%	24.50%	12.25%	33.25%

SUCCESS IN LICENSING

Will my invention be successfully licensed?

While the HIIE team works diligently to license UAB technology, in the end, the success of a licensed invention depends on finding a committed licensee. A licensee company needs to invest resources to develop an early-stage university invention, which carries significant financial risk for that company. While the HIIE team works to broadly market technology to potential company partners, it is not always possible to find the right licensee for each invention. Even after we find an interested licensee, our associates must still negotiate the terms of that license. So, there are no guarantees that your invention will be licensed.

What other factors play a role in the successful license of an invention?

There are many other factors that also play a part, such as personal and professional connections that inventors have within industry and within the scientific community, as well as relationships that the HIIE team continues to build within such communities. We strive to give our technologies a larger platform by attending conferences and showcasing technologies for license on social media and in other marketing materials. We also encourage inventors to continue to publish their research.

How much does it cost to obtain a patent?

A U.S. patent typically costs \$15,000-\$50,000 over the life of a



patent. While the cost for foreign patent filings depends on the extent of coverage desired, the cost for countries typically protected ranges from \$30,000-\$40,000 at the outset, with additional costs payable

annually. Many patents are never licensed, which means they don't generate revenue. The HIIE team must consider the risks along with the patentability and commercial potential of an invention before starting the patent process.

OTHER TYPES OF IP

There are several types of intellectual property aside from patents.

Here are some that are commonly disclosed to the HIIIE team:

Research tools

Research tools are typically biological materials, such as specialized or unique reagents (such as antibodies, for example), cell lines, plasmids or mice, which are created at UAB and owned by the UAB Research Foundation. Research tools may or may not be eligible to go through the patent process.

Copyrights

A copyright is an intangible property right that can arise in an original work of authorship fixed in a “tangible means of expression,” or when a work is reduced to a



concrete form, such as when it is written on paper and printed in books or recorded via audio or video. Software can also be protected by copyright.

Know-how

Know-how refers to the technical knowledge and skill required to perform a task. Know-how often resides with specific faculty members or others and can be difficult to transfer to third parties. Know-how is also difficult to protect. In some cases, know-how can be identified or reduced to writing.

Software

Software is a computer program or computer code, which can be protected by law against copying, theft or other use that is not permitted by the owner. Software is typically protected under copyright, trademark, trade secret or, in certain cases, software patent.

Trademarks

A trademark is a unique word, name, symbol, device or combination used in commerce to

identify and distinguish the goods or services of one manufacturer or seller from those manufactured or sold by others. In short, a trademark is a brand name, and the value of a trademark rests in its brand recognition, also known as “goodwill.”

Data

Data itself cannot be protected through patent or copyright, but data is still potentially valuable intellectual property and may be protectable by other means, such as contracts. In addition, the method of compiling data may also constitute intellectual property.

Trade secrets

Trade secrets are confidential practices and processes that give a company an advantage over its competitors.



AGREEMENTS & CONTRACTS

Throughout the commercialization process, inventors might encounter several types of commercial agreements.

Here are some of the agreements the HIE team most often executes:

Confidential Disclosure Agreements

A confidential disclosure agreement (CDA, also known as a non-disclosure agreement or NDA) is a binding, legal agreement between two or more parties that defines confidential information, allows the parties to exchange such information, defines each party's allowable actions with the other party's confidential information, and defines the purpose of the information sharing. CDAs can also protect the patentability of proprietary

information that has not yet been published.

Option Agreements

An option agreement describes the conditions under which the HIE grants a right for a limited period of time for the option holder to negotiate a license for UAB-owned intellectual property. Option agreements do not generally allow option holders (i.e. companies) to use the intellectual property in any commercial manner.

Term Sheets

A term sheet is usually a non-binding understanding between the HIE and a potential licensee, setting forth the basic terms (typically the financial terms) and conditions under which a UAB invention could be licensed. This is typically the basis upon which a

*An **exclusive license** gives the licensee the exclusive right to use that intellectual property in the licensed field, subject to certain limited rights retained by UAB.*

*A **non-exclusive license**, conversely, means that more than one licensee can obtain a license to the same intellectual property in the same field.*

more detailed legal document, such as a license agreement, will be drafted.

Materials Evaluation Agreements

A materials evaluation agreement allows interested companies to access and evaluate UAB inventions (such as a potential drug or cell line) to see if those inventions are of commercial interest before entering into a license agreement.

License Agreements

A license includes a grant of rights to a form of intellectual property,

such as an issued patent, a research material or reagent, a piece of software, etc. The license agreement will describe the rights and responsibilities related to the use of that intellectual property by the licensee. An exclusive license gives the licensee the exclusive right to use that intellectual property in the licensed field, subject to certain limited rights retained by UAB. A non-exclusive license, conversely, means that more than one licensee can obtain a license to the same intellectual property in the same field.

START-UPS

What is a start-up company, and what is the benefit to creating one?

A start-up is a new business formed to commercialize inventions (including but not limited to patentable inventions, devices, software, know how, etc.) through the development and sale of products or services. Those considering the launch of a start-up should consider several key factors, including:

- The stage of the technology and the level of development risk;
- The cost to bring a product to market versus the potential return on investment;
- The potential to launch multiple products or services from the same technology;
- The size of the target market

- and the competitive advantage;
- Market saturation;
- Alignment with potential commercial partners; and
- Potential revenue streams and funding sources, and whether those are sufficient for the company to thrive.

The HIIIE team is here to help UAB inventors and entrepreneurs evaluate these factors. Please email the team at innovation@uab.edu for assistance.

Who decides whether to form a start-up?

The choice to establish a start-up company around a UAB-owned technology is typically a joint decision made by HIIIE and the technology's inventors.

What role does an inventor typically play in a start-up?

There are certain roles that a full-time UAB faculty or staff member may fill in a start-up company. These roles include:

- Chief scientific or technical officer,
- Founder,
- Member of board of directors,
- Consultant.

A full-time faculty or staff member may not serve in a managerial role, such as:

- President,
- Chief Executive Officer,
- Chief Financial Officer,
- Chief Operating Officer.

It is important to understand that a faculty member's relationships with a start-up may create a conflict of interest, thereby affecting the faculty member's ability to participate in research and other activities at UAB. Faculty or staff involvement in a start-up that constitutes a significant financial interest as defined by

university policy must be disclosed as specified in the policy. The UAB Conflict of Interest Review Board (CIRB) will review potential conflict of interest in any of the faculty member's research.

How is equity in a start-up allocated?

Once an inventor, after discussions with HIIIE, decides to create a startup to further the technology, the first step is to identify a source of money and management given the constraints as noted above for the inventor role. Equity allocation between the entity that provides money and management and inventors is the most important discussion point between those parties. HIIIE staff can provide some high-level guidance on these matters. Inventors with questions about equity allocation should contact their licensing associate.

What if I personally receive equity/stock from a company?

An inventor who receives equity or stock from a company must report



it to UAB. For more information on this requirement, contact the [Office of Compliance & Risk Assurance \(OCRA\)](#) or the [Conflict of Interest Review Board \(CIRB\)](#).

How much of my time and effort will it take?

Starting a company is a considerable undertaking that typically requires a good amount of time and interest. Until the start-up team begins operations, the faculty or staff member will

likely be highly involved in the company formation process. Once that team is in place, there may not be as much daily effort required, but the start-up will likely still demand significant time and attention.

For additional information about start-ups, please see the [UAB Start-Up Guide](#). You may also visit the [Start-Up Toolkit](#) section of the [HIIE website](#) at uab.edu/innovation.

APPRECIATION

The HIIE team wishes to thank the Penn Center for Innovation, located at the University of Pennsylvania, for allowing us to use their excellent Commercialization Guide as inspiration for our Inventor's Guide, with considerable adaptations to reflect the policies and practices of the University of Alabama at Birmingham and the Bill L. Harbert Institute for Innovation and Entrepreneurship.



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