

**A HANDBOOK FOR**  
**INVENTORS &  
INNOVATORS**

**TECHNOLOGY TRANSFER AT  
THE UNIVERSITY OF ILLINOIS**

**UNIVERSITY OF ILLINOIS**  
URBANA-CHAMPAIGN · CHICAGO · SPRINGFIELD

# TABLE OF CONTENTS

## INNOVATION AND ECONOMIC DEVELOPMENT AT THE UNIVERSITY OF ILLINOIS

|   |   |
|---|---|
| What is Technology Transfer?                          | 3 |
| Technology Transfer Benefits the University Community | 4 |
| The University's System for Technology Transfer       | 4 |
| The Bayh-Dole Act                                     | 5 |
| Research Services                                     | 6 |

## INTELLECTUAL PROPERTY

|  |           |
|--|-----------|
| Defining Intellectual Property                       | 7         |
| University Ownership                                 | 7         |
| <b>Inventions and Patents</b>                        | <b>8</b>  |
| Inventorship   | 8         |
| Ownership  | 8         |
| The Standard Tests of Patentability                  | 9         |
| Publication and Public Disclosure                    | 9         |
| Patents as Property                                  | 9         |
| Being first  | 10        |
| <b>Patent Application Process</b>                    | <b>11</b> |
| Patent Decisions and Timelines                       | 11        |
| U.S. Patent Decisions                                | 12        |
| International and PCT Decisions                      | 12        |
| Foreign Country and Region Specific Patent Decisions | 12        |
| <b>Copyright</b>                                     | <b>13</b> |
| What Is/Not copyrightable?                           | 13        |
| Copyright Applies Automatically (Copyright notice)   | 13        |
| <b>Trademarks and Service Marks</b>                  | <b>14</b> |

|   |            |
|---|------------|
| <b>THE TECHNOLOGY TRANSFER PROCESS</b>                            |            |
| <b>Offices of Technology Management</b>                           | 15         |
| <b>Intellectual Property Disclosures</b>                          | 16         |
| <b>Screening Evaluation/Assessment/Patenting Decisions</b>        | 17         |
| <b>Release/Return (Assign) to Inventor</b>                        | 17         |
| <b>Marketing (Looking for Licensing Partners)</b>                 | 18         |
| <b>Marketing Related Agreements (Pre-licensing)</b>               | 18         |
| <b>Licensing</b>  | 19         |
| License Compliance  | 19         |
| License Negotiations  | 20         |
| <b>Revenue Sharing</b>  | 21         |
| <b>Other Licensing and Dissemination of Intellectual Property</b> | 22         |
| <i>Academic (Research) Use Licenses</i>                           | 22         |
| <i>Open Source Licenses</i>                                       | 22         |
| <b>CONSULTING AND INTELLECTUAL PROPERTY</b>                       | 23         |
| <b>STARTING A COMPANY</b>   | 24         |
| <b>Start-Up Company Formation Guide</b>                           | 25         |
| <b>IllinoisVENTURES</b>   | 27         |
| <b>Research Parks and Incubators</b>                              | 28         |
| <b>SBIR/STTR Grant Funding</b>                                    | 29         |
| <b>CONTACTS AND RESOURCES</b>                                     | Back Cover |

## WHAT IS TECHNOLOGY TRANSFER?

In the broadest sense, technology transfer is the transfer of knowledge, ideas, discoveries and innovations to the public. There are many avenues to accomplish this, including publication, students graduating and joining the workforce, participating in scientific meetings, collaborating with industry and licensing innovations.

For the purposes of this handbook, technology transfer is limited to the evaluation, protection, marketing and licensing of intellectual property to start-ups and existing companies. Also, the terms technology and intellectual property are used interchangeably here, even though there are subtle differences between them. Technology is a subset of intellectual property and commonly refers to commercially useful intellectual property.

# INNOVATION AND ECONOMIC DEVELOPMENT AT THE UNIVERSITY OF ILLINOIS

Dear Colleagues,

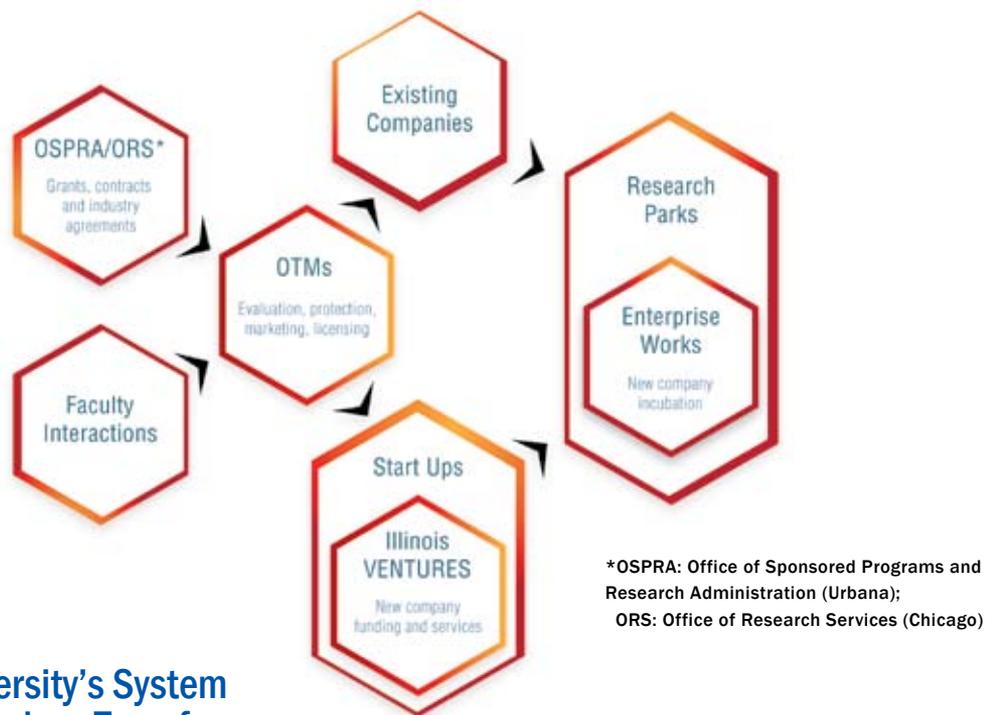
To innovate is to translate knowledge and ideas into economic growth and social well-being. With an annual funded research budget of more than \$645 million dollars, the University of Illinois is a leader in generating advances that translate into products and services that have a profound impact on human lives. This impact creates businesses, jobs and economic well-being, and these advances have come from all corners of the University.

The University has embraced this role by incorporating economic development as one of the cornerstones in its mission of teaching, research and public service. Also one of the results has been the creation of a system of resources designed to facilitate the protection and transfer of University intellectual property, helping ensure that University innovations have maximum public impact.

This handbook is an introduction to the University's intellectual property policies, to the patenting and commercialization services, intellectual property fundamentals, and most importantly, to your role in the process of commercializing University innovations.

*Avijit Ghosh*

Vice President for  
Technology and Economic Development



innovation and economic development

## TECHNOLOGY TRANSFER BENEFITS THE UNIVERSITY COMMUNITY

- Enhances the University's reputation
- Leverages University of Illinois technologies to benefit society
- Supports the growth and development of the Illinois and U.S. economies
- Strengthens the University's education and research programs
- Builds enduring connections between the University and industry and public agencies

## The University's System for Technology Transfer

During the past several years, the University has put in place a series of resources designed to facilitate all stages of the process of technology transfer. Overseen by the Office of the Vice President for Technology and Economic Development (OVPTED), the University's technology commercialization infrastructure is comprised of the following entities:

- **The Offices of Technology Management** (OTMs) on the Chicago and Urbana campuses evaluate, patent and license the University's intellectual property.
- **IllinoisVENTURES LLC** provides consultative services, potential funding and business development support for early-stage, research-driven companies, particularly those deriving from the University of Illinois and other midwestern Universities and federal laboratories.
- University-associated **research parks and incubators** in Chicago and Urbana support and nurture the growth of early-stage companies, encourage R&D collaboration between the University and private industry and public agencies and attract established companies that benefit from close working relationships with University faculty and students.

## THE BAYH-DOLE ACT

The Bayh-Dole Act, adopted in 1980, was established to promote economic development by allowing small businesses and non-profit organizations, including universities, to own inventions made under federally-funded research programs. Under the Act, universities are:

- Responsible for the management of inventions in compliance with the terms of the Bayh-Dole Act
- Expected to file patent applications on inventions they elect to own
- Encouraged to collaborate with commercial concerns through licensing, to promote the utilization of inventions arising from federal funding
- Expected to give licensing preference to small businesses

The Bayh-Dole Act sets the stage for university participation in technology transfer activities. The government retains certain rights, including rights requiring use of a licensed invention to safeguard against sequestering, requiring U.S. manufacture for exclusive licenses and retaining non-exclusive rights for government purposes.

## Sponsored Research

The Office of Research Services (ORS) on the Chicago campus and the Office of Sponsored Programs and Research Administration (OSPRA) on the Urbana campus are often the first step in the technology transfer process, since they are responsible for University research agreements involving government and corporate sponsors.

Agreements with outside sponsors often define the role of the outside sponsor in the commercialization process. ORS and OSPRA review the intellectual property terms in such agreements to ensure the interests of the University and the researcher are addressed. They consult with the OTMs when such agreements involve existing intellectual property being managed by the OTMs or when the intellectual property terms of the agreements are non-standard.

Because the OTMs and ORS/OSPRA work closely together, it is sometimes confusing to know which office to call when an intellectual property issue comes up. The Chicago and Urbana campuses are slightly different; the chart on the next page gives general guidelines for each Office's area of responsibility.

## AREAS OF RESPONSIBILITY ON THE CHICAGO AND URBANA CAMPUSES:

### ORS/OSPRA:

- Federal and industry sponsored research agreements
- Non-disclosure agreements involving University research (company & University proprietary information being exchanged)
- Materials transfer agreements-in, covering materials being transferred by third parties to the University for use in University research programs (see note below)
- Technical testing agreements
- Collaborative agreements, including no-dollar agreements
- Federal CRADAs (Cooperative Research and Development Agreements)
- SBIRs and STTRs
- Center and consortium agreements
- Visiting scientist agreements
- Facilities use agreements

### OTM:

- Non-disclosure agreements involving OTM-managed intellectual property
- Interinstitutional agreements
- Options
- Evaluation agreements
- Licenses
- Intellectual property and data sharing plans in center and consortium agreements

Note: Materials transfer agreements-out (involving University materials transferred to colleagues and others) is the one area handled differently by each campus. In Chicago, they are handled by ORS, and in Urbana, they are handled by OTM.

sponsored research

## DEFINING INTELLECTUAL PROPERTY

“Intellectual property” encompasses all forms of creativity, such as, inventions, software, discoveries, creative or artistic works, know-how, processes and unique materials.

For example, intellectual property may be machines, devices, instruments, computer programs, circuits, biological materials, chemicals, books, videos, photographs, paintings, sculptures or songs.

**Intellectual property is protected by law, through patent, copyright, trademark and trade secrets. Multiple forms of protection may be used on the same piece of intellectual property. For example, computer software can be protected by copyright, patent, trade secret and trademark. Intellectual property is also protected through agreements which control access and use of the intellectual property.**

# INTELLECTUAL PROPERTY

## University Ownership

The University of Illinois owns all intellectual property (e.g. software, copyrightable works and inventions) created by any University employee in the performance of employee duties at the University, or created by anyone using any University facilities, equipment or funds, with the exception of copyrights in traditional academic works such as scholarly publications and course notes.

Copyrights in “traditional academic works,” made by faculty and students independently at their own initiative and for traditional academic purposes, are owned by the authors. Examples include manuscripts, curriculum, books, lectures and teaching materials for faculty, and class notes, reports, papers and thesis for students.

Note, however, if the University is the impetus for the creation of such work, such as when it provides dedicated funding for the creation of a specific online course, such works are not necessarily considered traditional academic works. Ownership associated with educational tools and courseware made available online has varied and often complex ownership and rights of use, depending on the circumstances of development and the use of University resources.

Copyright ownership and invention ownership may be different. While the author(s) own the copyright in a manuscript or paper describing an

invention (because it qualifies as a traditional academic work), the University owns the underlying invention or software described in that paper. The University also owns the original records of the research, including laboratory notebooks.

## University Ownership Exception

An exception to University ownership may be applicable to certain student inventions resulting from selected design classes. On a class-by-class basis, the University may waive its right to own student inventions. This exception only applies when inventions arise from classroom activities when the only University facilities used were those of a traditional classroom or available to the general public, such as the library. The OTMs on both campuses would be happy to help you assess if an exception applies in a particular situation.

## Inventions and Patents

An invention is “anything under the sun” made by man, as long as it is new and useful. Inventions may include many types of discoveries and technological innovations, such as processes, methods, machines, articles of manufacture, devices, chemicals and compositions of matter. Inventions are protected by patents.

The U.S. Constitution recognizes the value of innovation to the economy and provides the owner of a patent with a time-limited monopoly (20 years) to stop others from exploiting the invention. In exchange for this exclusive right, the patent document, which is published, must fully describe the invention so that others can reproduce it and learn from it. In that way, the patent monopoly provides the incentive to share advances with the public and thereby contribute to growth in the field.

## INVENTORSHIP

A patent application must be filed in the names of the true inventors. The legal criterion for inventorship does not equal those used for authorship. Inventorship is defined by U.S. patent law. Broadly, an inventor is one who alone, or together with others, conceived of the ultimate working invention. Inventorship is not a reward for hard work to someone who only worked under direction. Inventorship is tied to the claims in a patent application, and is determined at the time the patent application is filed. As the claims in an application change, so may inventorship. The OTMs refer the final inventorship determination to outside patent counsel.

## OWNERSHIP

Inventorship does not equal ownership. Almost always, organizations own the inventions developed by their employees; University of Illinois patents are owned by the Board of Trustees of the University of Illinois.

**Almost all research conducted at the University can lead to inventions that may be patentable. A few examples are:**

**Engineering:** laboratory instruments, machinery, semiconductors & chips, manufacturing techniques, process improvements, nanotechnology, circuits, sensors, lighting, filtration and micro-devices.

**Agriculture:** grain and food processing, germplasm and plant varieties, equipment and devices and transgenics.

**Biotechnology:** new genes and their function, promoters, genetic markers, gene transfer methods, expression vectors and microorganisms.

**Chemistry:** new compounds, new drugs, drug targets, drug design, separation methods, coatings, additives, superconductors, metals, polymers and fuel cells.

**Software and Algorithms:** methods and processes in computer programs, operating systems, networking, data mining and storage, security and supercomputing.

Inventions that are not patentable include laws of nature, theories, scientific principles, pure algorithms and perpetual motion machines.

## PATENTS AS PROPERTY

A patent is property like a house or car that may be sold, leased or rented to others for “royalties.” Patent rights are often transferred to others for commercialization through licensing (see *licensing section*), rather than outright sale. The patent owner can decide how to allow others to use his property and can divide up rights in the property in different ways: for example, exclusively or non-exclusively, by field of use, or by geographical region.

## PATENTS AND FREEDOM TO OPERATE

Having a patent doesn’t necessarily mean you have the right to practice your invention and make products covered by it. Commercializing a technology can involve many processes, methods and materials that may not be covered under your patents, but that may be covered under patents owned by others. The owners of these other patents may have the right to stop you from commercializing your own invention, unless you obtain their permission to also practice under their patents. Obtaining rights to all the intellectual property that is needed to commercialize a technology without infringing the intellectual property rights of others is called “freedom to operate.”

## THE STANDARD TESTS OF PATENTABILITY

For an invention to be patentable, it must meet the following three tests for patentability:

**New or novel.** The invention must be different from all known inventions, products and published ideas. This does not mean that every aspect of an invention must be entirely new or novel. You can selectively patent only the new aspects if they also meet the other two tests.

**Non-obvious.** The invention cannot be an obvious or a logical extension of known ideas or invention. It cannot be readily apparent to a person skilled in the field of the invention.

**Useful.** The invention must work and have a practical application or utility, not just scientific curiosity.

It is also possible to patent an improvement to existing inventions, if the improvement meets the above criteria. Further, the patent application must fully enable someone to make and practice your invention. This is called “enablement.”

## PUBLICATION AND PUBLIC DISCLOSURE

Publication and other public disclosure of an invention by anyone, including the inventor, if it occurs before a patent application is filed, may prevent the ability to obtain a patent. What constitutes a public disclosure?

A public disclosure for international patent purposes is any oral or written communication to others outside the University that is not confidential and either teaches the invention completely or provides enough information to make development of the invention obvious. In the U.S., a public disclosure is any written document accessible by others, such as manuscripts, abstracts, Websites, meeting notes or presentations. Simply telling a colleague that you have made an invention, but not telling how to make it, is usually not considered a disclosure that could prevent you from obtaining a patent.

## TIMING BARS TO PATENTING

In the U.S., there is a one year grace period after a public disclosure in which to file a patent application and thereby stake a claim to an invention. In most countries, there is no such grace period. The international laws of most foreign countries preclude staking a claim to an invention after publically disclosing it. One must file a patent application prior to the first public disclosure. A broad guideline is to avoid “divulging to others who are not under a confidentiality obligation.” For questions regarding a specific set of circumstances, contact the Office of Technology Management on your campus.

## BEING FIRST

Not infrequently, two entirely different groups invent the same or very similar inventions. What happens then? In the U.S. it is the inventor who can document he/she was the first to invent (conceive) and was diligent in putting his/her invention into practical form and filing a patent application. This is where signed, dated and preferably witnessed written records become critical. Without thorough documentation, it is possible the first inventor may lose. Records can win or lose patents. In the rest of the world, the first inventor to file a patent application is entitled to the patent.

# u.s. patents

## WHY SHOULD I KEEP A NOTEBOOK?

The inventor’s notebook is one of the best ways to establish intellectual property ownership. Since the United States grants the patent to the first to invent, not necessarily the first to file, it is important to establish the date of conception and progress toward reducing the idea to practice.

## WHAT SHOULD BE IN THE NOTEBOOK?

The notebook should be a written record of all experiments, results — even if the significance is unclear — conversations including who you talked to and what topics you talked about, thoughts and future directions of investigations.

## HOW DO I CERTIFY A NOTEBOOK?

A credible witness should be chosen for his/her knowledge and ability to read and understand the concepts and principles in the notebook. They should not be co-inventors or family members or a notary public.

## INVENTOR’S NOTEBOOK

Laboratory notebooks documenting one’s research are almost always kept to support publications. In the case of applying for a patent, it is recommended to keep the notebooks in a more structured way so they can be relied upon as evidence to support being entitled to the invention.

## U.S. AND FOREIGN PATENT APPLICATION TIMELINE

### TIME 0

First U.S. application

### 1 YEAR

International-file coverage under PCT (Patent Cooperation Treaty)

### 18 MONTHS

U.S.-patent application typically published  
International-international search report indicates related patents + publications

### 12-36 MONTHS

U.S. Prosecution-first office action from USPTO, generating OTM responses and amendments to the claims

### 2-3 YEARS

U.S.-patent may issue (avg. time 18-36 months)  
International - PCT examiner indicates patentability

### 30 MONTHS

International- individual applications and translations filed in specific countries and regions when the case warrants.

### 4-10 YEARS

International- individual foreign patents may issue

## Patent Application Process

Obtaining a U.S. Patent starts with the filing of a “regular” patent application that includes a “specification” that describes how to make and use the invention and one or more “claims” that define the scope of what is new about the invention. The claims are what are used by courts to determine if someone is using or infringing your invention.

This application is filed in the United States Patent and Trademark Office (USPTO) and is assigned to a patent examiner who specializes in the particular technology area. The examiner considers the scope or breadth of the claims against prior patents and publications and issues an “office action” accepting (rarely) or rejecting (typically) the claims as not distinguishing over what is already known. In the case of claim rejections, the patent attorney, with the assistance of the inventor, rebuts the examiners’ arguments and/or responds with modifications (amendments) to the claims. One or more iterations are typically required to obtain allowance of the patent application. Once issued, the patent has a life of 20 years from the filing of the regular patent application. In the U.S., maintenance fees are required at four, eight, and 12 years to keep the patent in force.

A shorter, and often less expensive, “**provisional**” application can be filed in the U.S. before the **regular** application, to stake a claim to an invention. This type of application does not have to have claims, does not get examined, and becomes abandoned within one year of filing unless it is converted to either a regular U.S. application or a **PCT** (Patent Cooperation Treaty)

application within one year of filing. It is often used to extend patent life for an additional year.

A **PCT** application is an international “place holder” application filed in the home country of the inventor that reserves the right to file in the U.S. and many foreign countries at a later time. Just like provisional applications, PCT applications will never issue as a patent and will become abandoned if they are not timely converted to “regular” applications in the U.S. and each foreign country.

The first U.S. application can be filed in the USPTO either as a provisional, regular or PCT application.

## Patent Decisions

Patent decisions are made by the Offices of Technology Management. Patent filings are business decisions based on market considerations, necessity of protection and probability of success in licensing and recovery of expenses. There is an expectation that all patents filed are potentially commercially valuable enough to recoup at least the patent expenses.

## U.S. PATENT DECISIONS

The Offices pursue U.S. patents on a variety of innovations. University technologies are often disclosed well in advance of the development of the markets they will serve, making it difficult for the OTMs to accurately predict which patents will lead to significant revenue generation and/or significant market and societal impact. The OTMs' process removes from the portfolio those technologies that are not patentable, cannot provide an exclusionary position, are in a technology area that has been unsuccessfully pursued before or are in such a small market area that investment cannot be justified.

## INTERNATIONAL AND PCT APPLICATION DECISIONS

International patents involve escalating expenses and, as a consequence, the OTMs are much more selective in decisions to file international applications than U.S. applications.

Generally, the Offices pursue PCT applications only when there are significant potential markets in foreign countries or not pursuing international protection would make the technology much more difficult to license or if the technology has been licensed and the licensee pays for it.

## FOREIGN COUNTRY AND REGION SPECIFIC PATENT DECISIONS

Converting the PCT application into specific foreign country or regional applications (or filing in those countries directly without having filed a PCT application) has much greater cost implications than the decision to file in the U.S. This is primarily because of the combination of the country-by-country amplification effect and the necessity for translations and additional attorneys (foreign associates). Further, because the laws in foreign countries vary with respect to the value patent protection affords the owner; the value of foreign protection may be less than the corresponding value in the U.S.

The Offices usually pursue foreign/regional applications when a technology has been licensed, the licensee requests the application and is paying for the cost or there is a compelling case otherwise.

## TIMING

The average pendency of a patent application in the U.S. is at least three years and getting longer, and inventors in the biotech and computer fields should expect a longer waiting period.

## COST

Filing and obtaining U.S. patents costs between \$20,000 and \$30,000. Filing and obtaining patents in other countries may cost \$30,000 or more per country. Maintenance fees are also required.

## WHAT IS COPYRIGHTABLE?

**Literary works:** books, poems

**Computer software:** object code, source code

**Music:** notes, words, sound recordings

**Plays:** dances, pantomimes

**Art:** paintings, graphics, sculptures

**Motion pictures**

## WHAT IS NOT COPYRIGHTABLE?

- Ideas or concepts
- Factual information
- Listings without originality (phonebook)
- Titles or short phrases
- Type styles
- Public domain information
- Slogans

## Copyright

Copyright is the form of intellectual property that protects the expression of a creative idea that is fixed in a tangible form. It is like an acknowledgement of who created the work.

For example, in *The Wizard of Oz*, copyright protects the order of the words in the story and the layout of pictures, color and words on the page. The ideas, the plot or the characters are not protected. Each adaptation of this classic tale (book, screenplay, movie, music) generates independent copyrighted works.

For scientific writings, copyright does not protect the procedures, systems, processes, concepts, formulae, discoveries or devices described in the work.

“Copyright” is literally the right to copy, which includes the right to copy (display, perform), distribute copies and make changes to the original copyrighted work (known as derivative works). Copyright provides the owner with the right to determine how the work is copied and distributed to others, such as through traditional or online publication, through open access, through sale, lease, or lending and whether you want to make it available without a fee or to charge royalties.

## COPYRIGHT APPLIES AUTOMATICALLY

Unlike patentable inventions, copyrighted works are automatically protected under U.S. copyright laws, without having to undergo a formal registration process. However, it is still important to affix an appropriate copyright notice to make others aware that they are not free to utilize the work without permission. Works owned by the University should bear the following copyright notice: © 20XX *The Board of Trustees of the University of Illinois*. All rights reserved. There is also a formal registration process to document copyright in the Library of Congress.

Copyright lasts a long time. Author owned copyrights last for 70 years. Employer owned copyrights lasts for 100 years from creation or 95 years from publication.

### **Please note:**

Inventors are creators of patentable inventions. Authors are the creators of copyrighted works. In this document, for simplicity, the term inventor is used to refer to both.

## Trademarks and Service Marks

Trademarks and service marks are distinctive words or symbols used to identify the brand or origin of the goods or services provided. The trademark is not the name of a specific product but distinguishes the product from others and identifies quality. It can be suggestive, descriptive and arbitrary, but not generic. To qualify for a trademark, the mark must be used consistently on products in the marketplace. If the mark is used so often that it become generic, it loses the ability to identify the source of the products and is no longer entitled to trademark protection.

A mark that is registered is valid for 10 years, and is renewable as long as it continues to be used commercially.

The OTMs may file trademarks on marks associated with intellectual property when such marks have already become well-known and their association with the University's research enhances the value of the intellectual property. When units want trademarks associated with academic and research activities, University legal counsel (not OTM) helps advise and file on trademarks associated with the academic and research activities on campus. The Division of Intercollegiate Athletics handles trademarks associated with the University's athletic logos.

For more information on patents, copyrights and trademarks, go to the United States Patent and Trademark Office Website at:

[www.uspto.gov](http://www.uspto.gov)

### TRADEMARK EXAMPLES

Ever wonder why you are asked whether you want Pepsi or Coca Cola? It is so the trademark does not become generic. Several of the trademarks below have become generic and are no longer enforceable.

**Logos:** Apple, Shell, Blue Cross/Blue Shield

**Names:** Xerox, Kleenex, Coca Cola®  
Ivory Soap, Aspirin, Kodak, Crock Pot, Hoola Hoop

**Color/Sound:** Pink –Corning insulation, NBC chimes

**Slogans:** Have you driven a Ford?®, Don't leave home without it

**Examples of current and former University of Illinois trademarks:**  
Eudora, Mosaic, Mobius, NCSA, Virtual Director

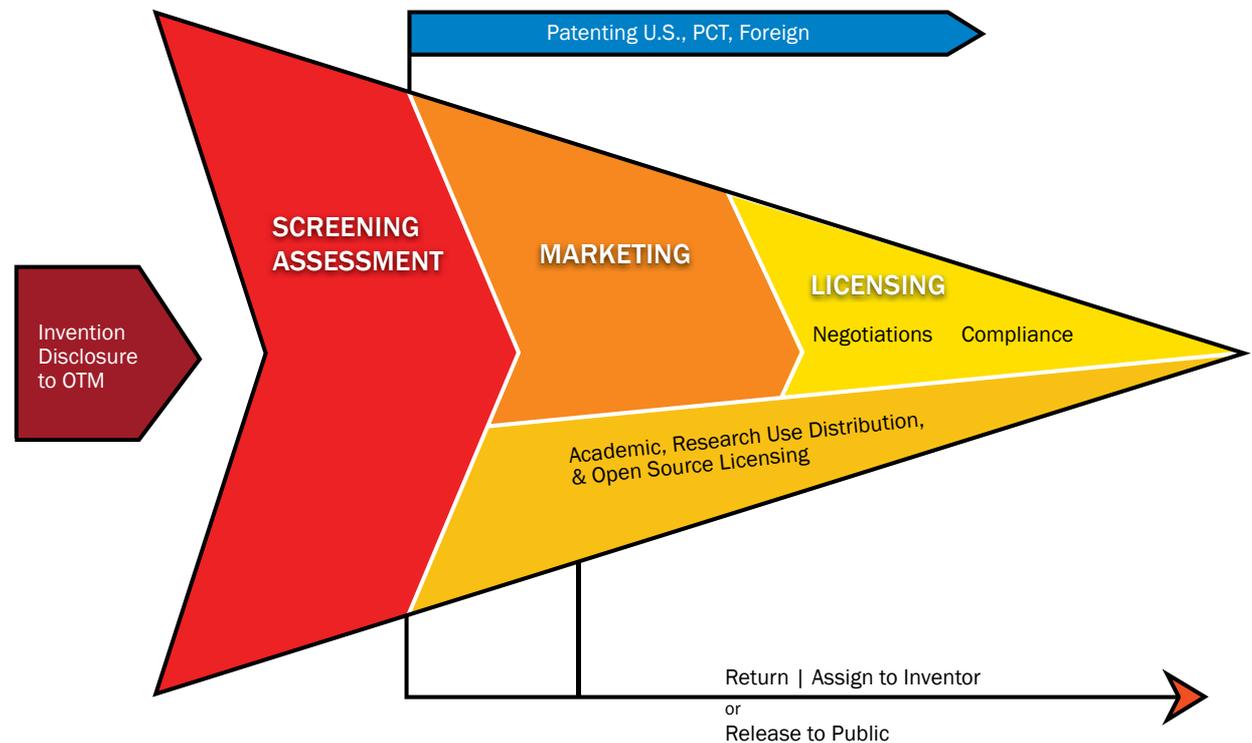
# THE TECHNOLOGY TRANSFER PROCESS

## The Offices of Technology Management

The Offices of Technology Management are responsible for managing the intellectual property generated by research and educational activities at the University of Illinois.

The Offices' mission is to encourage innovation, enhance research and facilitate economic development through the transfer of intellectual property.

The Offices have developed a documented, systematic and timely process for the analysis, protection and commercialization of intellectual property.



## Intellectual Property Disclosures/ Reports of Research Discoveries

Both OTMs actively reach out to faculty to encourage disclosures of new innovations. The disclosure is a written statement outlining the new innovation and documenting the circumstances of its development. The disclosure also identifies potential applications and what companies might be interested in licensing the IP if that information is known. Forms can be found on the OTMs' Websites.

The disclosure form helps OTM begin the process of evaluating the technology transfer potential for the intellectual property and complies with the obligations of Bayh-Dole. A technology manager is assigned the responsibility for the disclosure to shepherd it through the technology transfer process.

“Disclosure” to your OTM does not, by itself, protect the intellectual property. Only a patent or a copyright can do that. Also, disclosure to your OTM is confidential; it is not a public disclosure. A disclosure to someone outside the University is a public disclosure, unless you have a confidentiality agreement.

technology transfer process

### CAN I STILL PUBLISH MY FINDINGS?

Yes, findings can still be published and disclosure to your OTM does not alter your publication timetable. However, since publishing can affect the ability to obtain a patent, especially foreign ones, it is best to submit a disclosure prior to publishing or communicating your findings in a public forum.

### WHEN SHOULD I SUBMIT A DISCLOSURE?

It is best if inventors submit a disclosure between eight and 12 weeks before publication so that, if necessary, actions can be taken to protect both U.S. and foreign rights. Once publicly disclosed, an invention may not be patentable outside the United States. To be safe, inform your OTM of any imminent or prior presentations that include the IP.

## WHAT'S MY ROLE IN THE SCREENING PROCESS?

Inventors typically meet with OTM staff to discuss the invention and clarify aspects of the disclosure. Once a decision is made, the inventor will be contacted to discuss the outcome.

## WHAT'S MY ROLE IN PATENTING?

Inventors and OTM professionals speak with the patent attorney during the patenting process. Also, inventors will need to review drafts of documents, sign assignments and other legal documentation. OTM will guide the inventors during the process.

## Screening Evaluation/ Assessment

Through the screening review process the decision is made whether or not to pursue commercialization efforts for a technology.

Within six to eight weeks of receiving a disclosure, OTM staff complete a business-case analysis, called a screening evaluation, with a recommended course of action on commercialization. The results of the screening evaluation, which includes patent searches, an analysis of where the technology fits in the marketplace and research into possible licensees, are then shared with the inventors.

## Patenting Decisions

For technologies the OTMs decide to patent, an initial patent strategy is identified (see Patent Decisions and Timelines, page 11). In most cases, an independent patent law firm is hired to prepare and prosecute the patent application.

## Market Assessment

Detailed analysis, sometimes through the engagement of outside consultants who connect with industry experts, adds to the OTMs understanding of the potential market for the technology and helps determine further patenting and marketing actions. Inventors themselves often help enormously in finding interested licensees since they have many contacts through their own research.

## Release/Return (Assign) to Inventor

If the OTMs decide not to pursue or to discontinue pursuit of commercialization efforts on an innovation, it will release the invention and may assign the University's ownership rights to the inventors, if they are interested in pursuing a patent and commercializing the innovation independently. For any federally funded invention, the federal agency must approve the assignment.

## Marketing (Looking for Licensing Partners)

Considerable time and resources are devoted to researching and contacting the best possible licensing partners. OTM staff engage in a variety of marketing activities to spread the word about available University technologies, to increase their contacts and to stay up-to-date on industry developments. These activities include attending tradeshows and professional meetings, making calls and sending materials, producing promotional material, maintaining a Website, publicity and more.

When possible, and in addition to marketing individual technologies, the OTMs bundle similar technologies to market them together to maximize exposure to potential licensees.

Finding a potential licensee that is a good fit often takes time, since many University innovations are on the cutting edge and well in advance of the state of the industry and the needs of the marketplace. This makes it more challenging to find a licensing partner willing to invest the upfront funds needed to bring it to market. Sometimes, the market is not ready for licensing opportunities for years after an invention has been disclosed and patented. The OTMs work with inventors and others to determine the best time to market a technology.

## Marketing Related Agreements (Pre-Licensing)

Once a potential corporate partner is identified for a technology, **Non-disclosure Agreements** are used to protect the confidentiality of any non-public information. **Materials Transfer Agreements** and **Evaluation Agreements** may be used to provide companies with certain rights to use the technology for short term evaluation purposes only. **Option Agreements** reserve the right of a company to negotiate a commercial license. Options may be stand alone agreements negotiated directly through the OTM, or they may be clauses contained in other agreements, such as sponsored research agreements or the above pre-licensing agreements.

If intellectual property is developed by more than one institution, an **InterInstitutional Agreement** is often negotiated to set out the terms under which the two universities will cooperate to assess, protect, market, license and share revenues from the jointly-owned property.

technology transfer process

## WHAT'S MY ROLE IN MARKETING?

Inventors are welcome to work closely with their technology manager to market their invention.

There are many aspects of marketing that inventors may choose to be involved with, ranging from helping to transfer knowledge to recommending contacts that might be interested in licensing the inventor's technology.

The OTMs also invite inventor feedback on licensing terms and work closely with inventors when crafting pre-licensing agreements such as material transfer and evaluation agreements.

## WHAT'S MY ROLE IN LICENSING?

Licensing is a primary function of the OTMs; inventors will be informed of progress in licensing. Inventors often are closely connected to others in their field and may be consulted by their OTM on the business terms of the license.

Further, the inventor's expertise is often critically important to transfer the technology and related know-how to the licensee. The University license places only nominal obligations on the part of the inventor to assist in the transfer of the licensed technology. When more than minimal time and effort is necessary, the licensee will negotiate a separate consulting arrangement with the inventor.

## WHAT EFFECT DOES A LICENSE HAVE ON MY ABILITY TO DO RESEARCH?

You can still continue research using a licensed invention, even if it is exclusively licensed. The University retains the right to use a licensed invention in its academic research and teaching.

## Licensing

A license is the technology transfer agreement granting some of the University's rights as owner of an intellectual property (licensor) to a company who has agreed to certain obligations and responsibilities to commercialize the intellectual property (licensee).

The University licenses its varied technologies (patents, software, databases) to companies who demonstrate the capability and commitment to develop the early stage innovations into commercial products.

Licensees also demonstrate such commitment by providing a written technology development plan to the University. This plan should include, but not be limited to, a description of the technologies to be licensed, the resulting product, market analysis, a product development timeline and the company resources committed to development.

The terms of the license are negotiated based on the licensee's plan.

### LICENSE COMPLIANCE

After a technology is licensed, the Offices manage the license to ensure all terms and conditions are adhered to and the technology reaches its fullest potential. If the licensee does not comply, steps may be taken to terminate the license, in which case the invention would be available for licensing to another company.

## LICENSE NEGOTIATIONS

The licensing process begins with negotiations with interested industry partners, including start-up companies in which term sheets summarizing the essential business terms of the licensing agreement are exchanged. Below are the types of business terms generally addressed.

### **Scope of License Rights:**

License rights such as exclusive, nonexclusive, field of use limitations and territory limitations are established to be commensurate with the licensee's product development plans and the market. The University's licensing objective is to obtain widespread use of its technologies.

### **License Fee:**

Together with the royalties and other monetary terms, the value depends on the scope of the license rights and the market value of the technology licensed.

### **Royalties:**

Royalties are paid by the licensee when products or services that require the use of the technology are sold. Royalties can be expressed as a percentage (%) of sale or a fee per selling unit. Royalty rates vary according to the industry, the significance of the invention and the base upon which the royalty is applied (e.g., unit, component, subsystem.)

### **Sublicense Sharing:**

Exclusive licenses usually provide the licensee with the right to sublicense, or authorize others, to make, use and sell the University's technology to facilitate widespread use. Revenues received by the licensee from sublicenses are shared with the University.

### **Minimum Royalties:**

Minimum royalty payments are established to encourage diligence in sales of products/ services requiring the use of the technology.

### **Patent Reimbursement:**

Recovery of the costs incurred for protecting the technology in the U.S. and internationally are part of the license.

### **Performance (Diligence) Milestones:**

University technologies often require a significant period of time and effort in product development before they are ready for the market. During the development phase, licensees are required to provide periodic reports and meet specific milestones in order to retain a license, especially an exclusive license.

## Revenue Sharing

When an invention, software or other intellectual property is successfully licensed, or commercialized, the revenues are shared with inventors and creators.

Inventors receive 40% of revenue after deducting expenses (such as costs for protecting the intellectual property), the inventor's department or unit receives 20% and the University receives 40%.

In the case of multiple inventors, they will be asked to help determine the allocation of the 40% inventors' share. The allocation is formalized in a "Proceeds Distribution Agreement." The Proceeds Distribution Agreement also addresses the shares among multiple departments/units, using the recommendation of the inventor(s) and the concurrence of the associated department/unit heads.

### **How is Equity distributed?**

Equity from a license is shared with inventors when it is cashed in by the University and is distributed, according to the Proceeds Distribution Agreement.

### **What are the tax consequences?**

Licensing revenues are considered taxable income. The University reports licensing revenue paid to inventors as income on Form 1099. Your tax advisor can provide specific advice.

## Academic, Research Use and Open Source Licensing

Often, certain types of intellectual property (copyrighted software and biological materials) are best disseminated to the public through ways other than traditional licensing on a royalty or revenue generating basis. These other ways include research use licenses for academic purposes (software and materials transfer agreements) and open source licensing for software (which can be for both research or commercial use). Even though such transfers and dissemination are not revenue generating to the University, they promote visibility and public use of University research and can potentially aid in the University's mission for public good.

When choosing between academic, open source and traditional revenue generating licensing, the Offices of Technology Management can assist software developers in deciding which option is the best for their specific software and research project.

**Academic (Research) licenses** permit research institutions or individual researchers to use a program or material free of charge or at a research-use rate but do not permit those institutions to transfer the software or materials to third parties or make commercial use out of the technology. Such research use licenses also leave open the possibility of future traditional revenue generating commercial licensing.

**Open Source licenses** allow free and less restricted distribution of software, including commercial use, and promote testing and further development and adoption of the software in a collaborative environment. Most federally funded research in software development requires open source dissemination. However, open source licenses often do limit future proprietary commercial licensing potential.

technology transfer process

### WHAT IS THE OPEN SOURCE?

In the software community, Open Source is a forum in which multiple unaffiliated parties have access to the source code of a software program for the purposes of collaborative development. People who participate in the open source believe that more scrutiny brings greater reliability and that software is an evolving entity that can achieve its fullest potential without the restrictions of commercial sale.

### WHAT'S MY ROLE IN OPEN SOURCE LICENSING?

The researcher or unit makes the recommendation for open source licensing, and they then post and distribute the software through their own Websites. When Urbana software is placed in the Open Source it is usually through the University of Illinois/NCSA Open Source License. This license places minimal restrictions on use, thereby maximizing flexibility of use and dissemination. The University of Illinois license can be viewed at: <http://www.opensource/licenses/UoI-NCSA.php>.

## FACULTY CONSULTING AND THE UNIVERSITY

Faculty consulting often enhances the skills and reputation of the faculty and is a benefit to the University and provides a public service. Faculty are expected to arrange their consulting activities so as not to conflict with University duties and responsibilities.

# CONSULTING AND INTELLECTUAL PROPERTY

The following overview provides information about the general terms and conditions of consulting arrangements, as well as identifies areas of overlapping obligations and responsibilities that may arise when undertaking consulting work.

**1. Scope of Work** - A clearly defined scope of work is often the best way to avoid overlapping intellectual property and research obligations. The scope of work should be limited to the specific work to be performed. It is best to avoid overly broad statements, such as “other services as may be requested from time to time” or “services in the area of cancer research,” as these may encroach on your University research areas.

**2. Intellectual Property** - Often consulting agreements require that the company own the intellectual property developed by the consultant. This requirement may be difficult to comply with when the area of consulting overlaps with the faculty member’s area of research. Narrowing the scope of work (such as only to company proprietary innovations) may help. The consulting agreement should not convey to the company any rights in intellectual property developed using University facilities or developed under University grants or contracts. Make the client aware of your University obligations related to ownership of intellectual property. Watch out when the consulting agreement asks for rights to improvements or future inventions in the area, so you don’t put your related research programs at risk. If the company owns it, you do not have a right to use it in your research.

**3. Confidentiality** - Typically, the consultant must have access to company proprietary information that the consultant must keep confidential. Be specific about what information is to be confidential. If there is potential for overlap in research, ensure you have continued rights to publish.

**4. Exclusivity** - There may be provisions that restrict the consultant from providing advice or working with other companies. This may impact the faculty’s ability to work with other corporate sponsors within the University.

**5. Liability and Indemnification** - The consultant has no control over what the company does with the advice and services he/she provides. Therefore, it is advisable to include a provision that limits the consultant’s liability and expressly disclaims liability for any products produced by the company. Further, the company should indemnify the consultant for any third party claims or actions related to the consulting services. Since consulting work is private, it is not covered under the University’s general insurance. If there is a potential for liability, the consultant should check whether his/her personal liability policies would cover such claims.

# STARTING A COMPANY

A new company is one way to further develop and commercialize discoveries made at the University of Illinois. A start-up can be a preferred route for commercialization because it can provide the professional guidance and development needed to demonstrate commercial viability, and thus improve the chances that an early-stage technology will get to market.

Numerous resources exist within the University system to support the development of new businesses commercializing University intellectual property. For example, IllinoisVentures is a premier seed and early-stage technology investment firm focused on research-derived companies that was conceived and launched by the University, and has been consistently named by *Entrepreneur* magazine to its national list of the top 100 venture capital firms. IllinoisVentures' professionals often collaborate with OTM professionals to assess the viability of a start-up path and are available to consult with faculty and students on topics related to business launch and entrepreneurship. In addition, research park and incubation facilities on both campuses provide physical space and the environment to foster start-ups.

Many factors are involved in the decision of the OTM to license a technology to an existing company or to a start-up company. Considerations include optimization of stakeholder positions (University, faculty, etc.), improving the probability that the technology reaches market and how best to accomplish further commercial development outside the research laboratory. The licensing or optioning process begins with somewhat standardized templates that tend to provide both equity and royalty consideration to the University in exchange for commercial rights to the technology.

When a start-up includes one or more University faculty members, a "conflict of interest management plan" will be required. That plan outlines the relationship between a faculty member's activities with the company and his/her research and teaching responsibility. The plan identifies and mitigates possible areas of conflict, such as those related to conflict of commitment and/or conflict of interest and lays out a plan for disclosure and management of these conflicts. To initiate a conflict of interest management plan, contact the Office of the Vice Chancellor for Research.

## starting a company

### WHAT IS A START-UP COMPANY?

A start-up company is a new business entity created to market a specific invention. It is an alternative to licensing an invention to another, already existing company.

### WHAT ROLE DOES THE INVENTOR PLAY IN THE START-UP COMPANY?

The inventor usually serves as a consultant or adviser to the new company. That role may change as the company develops. However, much more time is required early in the process of establishing the company.

### WHAT SUPPORT DOES THE UNIVERSITY PROVIDE TO START-UPS?

The University provides resources and services that make start-up formation easier, such as IllinoisVentures and incubation facilities.

University licenses to start-ups are structured so as not to overburden the company financially during the first years.

## Start-Up Company Formation Guide and Checklist

Below is a guide to the process of forming a start-up company to license University technology.

- **Review the company's business model** with professionals to determine whether a viable business case is possible. IllinoisVENTURES and the Offices of Technology Management can help with the review.
- **Let your Office of Technology Management know you are interested in forming a start-up.** You may then want to enter into a standstill or option agreement to ensure the University won't license the technology to any third party. This allows time for an individual or a company to develop a business plan and satisfy other licensing requirements.
- **Develop a preliminary business plan** and submit to your OTM. The business plan should identify product(s), business model, markets (size, competition, fields), management, development process and timeline, financial costs, capitalization or funding required and financial projections for five years. The plan should also identify what technologies are needed and their benefits to the company. The business plan needs to be specific enough that the OTM and the company can begin to negotiate the deal framework and to identify meaningful milestones for the license.
- **Negotiate license deal framework** with the OTM. The deal terms represent a package whose value depends upon the type and significance of the technology being licensed and external market factors. Components of the package include exclusivity, field of use, equity, royalty rates, sublicense sharing, diligence milestones, minimums and other payments. The terms are interrelated, and there is trade-off among terms in arriving at the entire deal. Equity is typically taken in start-up company deals in exchange for lessening the cash burden on the company in the early years.
- **Conflict of interest management plan** approval. When a start-up company involves a University faculty member, a plan is developed describing the relationship between the company and the faculty's University research and students. This plan identifies and mitigates potential conflicts of interest and should be initiated as early as possible with the Office of the Vice Chancellor for Research.

- **Establish company as a legal entity.** A license for a technology will only be granted to a company demonstrating the capability of developing the technology into a commercial product. Documentation needed includes Articles of Incorporation, by-laws and founders agreements or the equivalent.
- **Finalize the license agreement.** License drafts are exchanged and the final deal terms and contract language is negotiated and agreed upon.
- **Complete a business plan** acceptable to the University.
- **Finalize the investment agreements.** Investment documentation and agreements are reviewed and approved by the University and should be ready for signing:
  - Charter (Articles/Certificate of Incorporation)*
  - Purchase Agreement*
  - Investor Rights Agreement/Registration*
  - Rights Agreement*
  - Stockholders Agreement*

- **Have experienced management** on board at the time of signing the license agreement. If that management is on an interim basis, specify assembly of a qualified management team within a period of time after execution of the license agreement.
- **Provide a capitalization plan and capitalization table.** A start-up must disclose the current levels of financing, equity value or capitalization at the time of license signing and must reach specified levels of such financing within an agreed-upon time.
- **Sign license and investment agreements and provide stock certificate.**
- **Monitor agreements.** The company, the University and the investors monitor company progress toward commercialization obligations and milestones.

## CONFLICT OF INTEREST FACULTY RESPONSIBILITIES:

- Obtain prior written approval to engage in non-University income-generating activities
- Disclose such activities annually, whenever a substantial change occurs or when required by granting agencies
- Refrain from spending so much time on external activities that they interfere with University responsibilities
- Refrain from advancing one's own interest or the interest of family members to the detriment of the University's interest
- Disclose involvement of University students or employees in one's external activities
- Work with the department head to identify and evaluate potential conflicts, and manage or eliminate them

## IllinoisVENTURES

The Board of Trustees of the University of Illinois created IllinoisVentures, which was launched in 2002, to catalyze the creation and development of research-derived companies in information technologies, physical sciences, life sciences and clean technology, particularly those deriving from the University of Illinois and other Midwestern Universities and federal laboratories. Under the guidance of a world-class board comprised of leaders from all phases of the investment community as well as academia, IllinoisVentures has created a state-of-the-art environment for new company formation via a unique public/private partnership that is a valuable resource for those interested in starting up a company. In 2004 IllinoisVentures raised their first venture fund, the Illinois Emerging Technologies Fund, in recognition of the limited presence of seed and early-stage technology investors actively committing capital in Illinois.

To date, IllinoisVentures has formed and supported an array of companies in multiple business domains throughout the region, which have attracted substantial third-party co-investment from leading investment firms across the nation. The long-standing collaborative experience of the team working together in early-stage new enterprise formation is the basis of that success.

With offices in Champaign and Chicago, IllinoisVentures professionals are available to consult and advise researchers and entrepreneurs in entrepreneurship and business development, and to help mold concepts, vision, intellectual property, sweat and passion into breakthrough, high-growth companies. IllinoisVentures professionals provide guidance to faculty in early market assessment, competitive analysis, business strategy and other activities necessary to create high potential, venture-ready businesses. The firm also provides funding through all stages of business creation and development.

## Research Parks and Incubator Facilities

In addition to the support from the Offices of Technology Management and IllinoisVentures, the University of Illinois Research Park and the Chicago Technology Park are operated in partnership with the University of Illinois to nurture start-up companies and catalyze commercialization of University technologies.

- University-associated research parks and incubators at Urbana-Champaign and Chicago support and nurture the growth of these early-stage companies, encourage research and development collaboration between the University, private industry and public agencies and attract established companies that benefit from close working relationships with University faculty and students. These research parks provide critical infrastructure space for early-stage companies that require wet and dry laboratory capacity for product research and development.
- The Research Park at the University of Illinois in Urbana-Champaign provides an on-campus environment where technology-based businesses can collaborate on research and development with faculty and students and enjoy access to the campus' vast intellectual resources and research infrastructure. The Research Park is now home to a range of companies employing many people in high technology careers.

- EnterpriseWorks is a technology business incubator in the University of Illinois Research Park and has been the launching pad for more than 70 start-up companies since it opened in 2003. EnterpriseWorks provides an affordable, high-tech environment with lab and office space as well as access to business development services. EnterpriseWorks can house as many as 30 companies at any given time and offers short-term flexible leasing options.
- The Chicago Technology Park has supported companies involving drug discovery and delivery, medical devices and testing, genomics and nanotechnology. The 56-acre Research Park is located within the Illinois Medical District. It has graduated more than 25 firms into the local economy, with an average growth rate of 200 percent in the past four years.

illinoisventures&research parks

### ENTERPRISEWORKS PROVIDES RESOURCES INCLUDING:

- Entrepreneur in Residence consulting services
- Start-up Café events with successful company founders
- Tenant forum educational events
- Allied agency status for companies with the University
- Research support services from the Vice Chancellor for Research
- CEO roundtable dinners for networking and peer-to-peer support

### THE CHICAGO TECHNOLOGY PARK PROVIDES RESOURCES INCLUDING:

- Job bank program
- Internship programs
- Informal networking sessions
- Bioinformatics program
- Access to UIC library and to UIC facilities and resources

## WHAT FEDERAL AGENCIES PARTICIPATE IN THE SBIR PROGRAM?

Each year, 11 federal departments and agencies reserve a portion of their R&D funds for award to small business through the SBIR program. These agencies include:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Education
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of Transportation
- Environmental Protection Agency
- National Aeronautics and Space Administration
- National Science Foundation

### **May a portion of an SBIR award be used to pay for outside services or assistance from a university or other nonprofit research institution?**

Yes: Phase I, up to one-third of the award can be used for outside assistance, and in Phase II, up to one-half of the award.

## SBIR/STTR Program

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs provide qualified small businesses, including faculty start-ups, with opportunities to propose innovative projects that meet specific federal needs. These programs offer more than \$2 billion dollars annually to support the research and development of technology by small businesses across the nation. Awards are based on small business qualifications, degree of innovation, technical merit and future market potential.

SBIR funds support research by a business with or without an academic partner. STTR funds are also awarded to a business but recipients must have a U.S. research institution as a collaborative research partner. The SBIR/STTR programs are structured in three phases, the first two of which are supported by SBIR/STTR funds.

**Phase I.** The objective of Phase I is to determine the scientific or technical merit and feasibility of the proposed R/R&D efforts. The Phase I period concentrates on the R&D efforts that prove the scientific or technical feasibility of the approach or concept and that which are a prerequisite for further support in Phase II. Phase I awards are for periods up to six months in amounts up to \$100,000.

**Phase II.** The objective of Phase II is to continue the research or R&D effort initiated in Phase I with approaches that appear sufficiently promising because of Phase I. Phase II awards are for periods up to two years in amounts up to \$750,000.

**Phase III.** An objective of the SBIR/STTR program is to increase private sector commercialization of innovations derived from Federal R/R&D. During Phase III, the small business concern is to pursue commercialization with non-SBIR/STTR funds.

**Both the SBIR and STTR programs have specific eligibility criteria for participation.**

**Small businesses must fulfill the following criteria to participate in the SBIR program.**

- American-owned and independently operated
- For-profit
- Principal researcher employed by business
- Company size limited to 500 employees

While there is no size limit for a nonprofit research institution, the nonprofit research institution must also meet certain eligibility criteria.

- Located in the U.S.
- Nonprofit college or university or
- Domestic nonprofit research organization  
or
- Federally funded R&D center

The agencies participating in the SBIR/STTR programs have differing requirements for program involvement, and it is very important to understand and comply with these individual requirements. Each agency publishes a proposal solicitation at least annually. These solicitations can be viewed on their individual Websites accessible at:  
<http://www.zyn.com/sbir/>

**Small businesses must fulfill the following criteria to participate in the STTR Program.**

- American-owned and independently operated
- For-profit
- Principal researcher need not be employed by small business
- Company size limited to 500 employees

A competitive program supported by the state of Illinois Department of Commerce and Economic Opportunity is available to technology-based entrepreneurs including faculty members interested in submitting an SBIR/STTR grant. Those supported through the program receive approximately 30 hours of assistance with identifying, advancing, preparing and/or reviewing SBIR/STTR Phase I proposals from experienced grant-writing consultants. Contact your Office of Technology Management for more information.

sbir/sttr program

## WHAT FEDERAL AGENCIES PARTICIPATE IN THE STTR PROGRAM?

Each year, five federal departments and agencies reserve a portion of their R&D funds for award to small business/nonprofit research institution partnerships. These agencies include:

- Department of Defense
- Department of Energy
- Department of Health and Human Services
- National Aeronautics and Space Administration
- National Science Foundation

**For STTR awards, what is the minimum percentage of research that can be conducted by the small firm and institution receiving an award?**

Small business must perform at least 40 percent of the work and research institutions must perform at least 30 percent.

**When are the proposal deadlines?**

They vary depending on the agency. Information on solicitations and proposal deadlines can be found at:  
<http://www.zyn.com/sbir/>

# CONTACTS

## **Office of the Vice President for Technology and Economic Development**

346 Henry Administration Building  
506 South Wright Street, MC-365  
Urbana, IL 61801  
Phone: (217) 265-5440  
Fax: (217) 265-5444  
Email: [vpTED@uillinois.edu](mailto:vpTED@uillinois.edu)  
Website: [www.vpted.uillinois.edu](http://www.vpted.uillinois.edu)

## **Office of Technology Management Urbana-Champaign**

319 Ceramics  
105 South Goodwin, MC-243  
Urbana, IL 61801  
Phone: (217) 333-7862  
Fax: (217) 265-5530  
Email: [otm@uillinois.edu](mailto:otm@uillinois.edu)  
Website: [www.otm.uillinois.edu](http://www.otm.uillinois.edu)

## **Office of Technology Management Chicago**

1853 West Polk Street, Suite 446  
MC-682  
Chicago, IL 60612  
Phone: (312) 996-7018  
Fax: (312) 996-1995  
Email: [otm@uic.edu](mailto:otm@uic.edu)  
Website: [www.otm.uic.edu](http://www.otm.uic.edu)

## **IllinoisVENTURES, LLC**

20 North Wacker Drive, Suite 1201  
Chicago, IL 60606  
Phone: (312) 251-0700  
Fax: (312) 251-0701

2001 South First Street, Suite 201  
Champaign, IL 61820  
Phone: (217) 239-1950  
Fax: (217) 239-1948  
Website: [www.illinoisventures.com](http://www.illinoisventures.com)

## **Research Park & EnterpriseWorks**

60 Hazelwood Drive  
Champaign, IL 61820  
Phone: (217) 333-8324  
Fax: (217) 333-4050  
Website: [www.researchpark.uillinois.edu](http://www.researchpark.uillinois.edu)

## **Chicago Technology Park**

2201 W Campbell Park Drive  
Chicago, IL 60612  
Phone: (312) 633-3434  
Website: [www.techpark.com](http://www.techpark.com)

***innovations.uillinois.edu***

©2009 The Board of Trustees of the University of Illinois  
All rights reserved.