

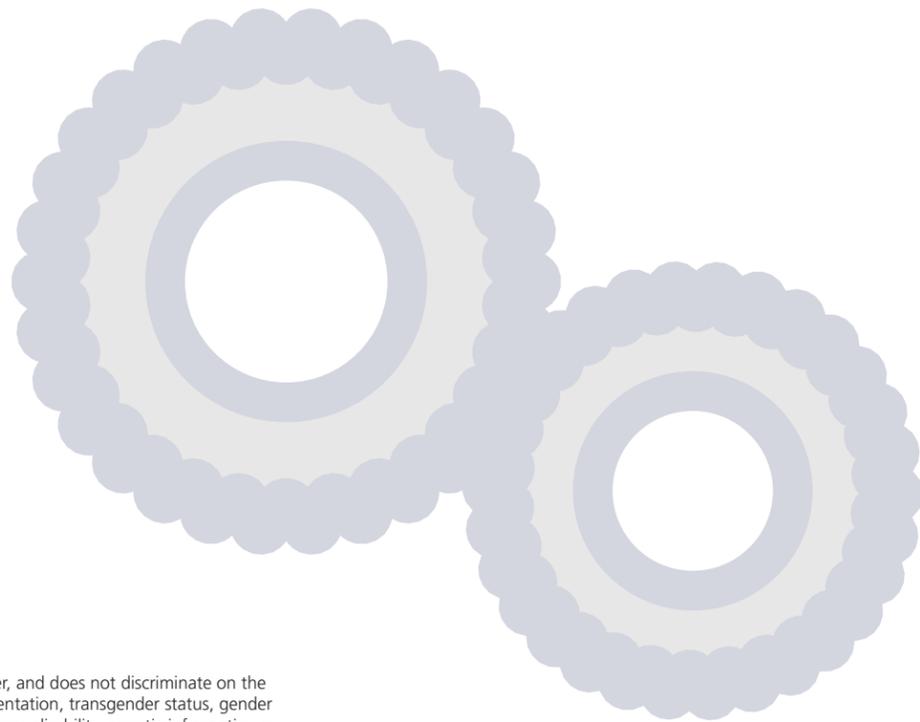
# **Commercialization Guide**

Office of Innovation and  
Economic Development



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## Overview

### What is commercialization?

Commercialization, writ broadly, leverages university research power to solve real-world problems. When most people think about commercialization – also commonly called technology transfer – they may think first about translating an innovation from the lab to the marketplace. While that is the classic definition of the process, commercialization also can refer to any sponsored activity on behalf of external partners. At UMaine, there are several ways for researchers to approach the different aspects of commercialization. In all cases, the goal is to develop real-world applications for university research that can solve problems and help improve lives.

### Is this guide for me?

We created this guide for those who conduct research at the University of Maine – faculty, staff and students – and who think their research may have commercialization potential or just want to learn more about what that means and how it works. This guide will walk you through everything from basic research collaborations with external partners to protecting intellectual property related to your work to starting a business related to a discovery you make in an on-campus lab.

### I'm intrigued, but this sounds complicated. Who can tell me more?

Commercialization at UMaine is overseen by the Office of Innovation and Economic Development (OIED). We created this guide, and you can think of us as your commercialization concierge. We're here to support and advise you on commercialization activities related to your research. Read on!

### About the Office of Innovation and Economic Development (OIED)

UMaine's OIED works across disciplines and through strategic partnerships to leverage University of Maine resources to help create jobs, develop workforce, and grow Maine's economy.

Among OIED's core missions is turning research and development activities into new economic opportunities for the state of Maine.

We provide solutions in three overlapping service areas:

**The Department of Industrial Cooperation** facilitates UMaine research collaborations with external groups, including private industry, nonprofits and foundations, communities, and government bodies, overseeing all aspects of the necessary contracts for such work.

**The Foster Center for Innovation** supports researchers and students who want to turn ideas into action, offering programs, services and courses around commercialization, business development and Innovation Engineering.

**The Office of Technology Transfer** guides researchers through the process of formally licensing technology and intellectual property (IP) developed at UMaine to third parties, coordinating all facets of IP management including market evaluations and patent and other IP protections.

All of these groups operate under the OIED umbrella and are coordinated by the same team of people. Flexibility is key to our work and solutions are our specialty. We're here to help – from answering your preliminary questions to guiding you through the launch of a startup, and everything in between.

## Meet the team

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## Why does UMaine seek to commercialize research?

Commercialization is central to UMaine's mission as a land, sea and space grant institution. As the state's flagship research university, UMaine has a responsibility to serve the state through integrated teaching, research, and outreach. Our faculty and students contribute knowledge to issues of local, national, and international significance, and commercialization of research activity helps that knowledge have meaningful impact in our communities.

UMaine is able to commercialize research for public benefit thanks to the Bayh-Dole Act of 1980. Bayh-Dole allows universities to assert ownership rights to inventions made by their employees using federal funds and mandates that universities make reasonable efforts to translate potential discoveries into useful products and services via licensing of technology to the private sector.



## What are the benefits of commercialization?

Commercialization can seem daunting, especially if you've never done it before. Translating an innovation from the lab to the marketplace can be rewarding in many ways – for you as a researcher, for your department, your students, the university, the state of Maine and society at large. Industry collaboration offers similar benefits for these same groups.

### Benefits for You

- New sources of funding/sabbatical support
- Develop advocacy partners
- Recognition for lab/center/department
- Broaden experience/inform future research
- Generate additional personal income

### Benefits for Students

- Experiential learning
- Skills and connections to leverage for internships/job placements
- Undergraduate/graduate research opportunities
- Sense of contribution

### Benefits for Maine

- Solving problems in Maine's key sectors
- Supports UMaine's research and service missions
- Economic development opportunities

### Benefits for Society at Large

- Research put into practice/use
- Make a difference in people's lives
- Economic development opportunities

## What is the difference between OIED and the Office of Research Administration?

The group that would become OIED was established at the university in 1947 to conduct contract research for Maine's manufacturing sector. OIED grew from there to support the university's engagement with other industries on project work, and those beginnings laid the groundwork for the strategic partnerships we are skilled at forging today.

Existing at the intersection of UMaine's teaching, research and service missions, OIED is uniquely positioned to build coalitions and manage collaborations between the university and external groups. The office bridges business and academia, understanding and responding to the priorities and obligations of both groups.

The Office of Research Administration manages all federally funded opportunities and related reporting requirements.

## This all sounds good, but how does it actually work?

The definition of commercialization is broad, and the process can work in several ways depending on the approach you take. Partnering with industry on sponsored activity is relatively straightforward and will require less time investment from you. Often, you'll be trying to solve a defined problem based on industry need. The longer and more labor-intensive path involves bringing a new invention to market (either through forming a startup or licensing your invention to a company), yet this has the potential to yield more societal impact and more profit over time. These paths often intersect – partnering with industry can lead to discoveries that you may be interested in pursuing as a licensing opportunity or through the formation of a startup.

**Here are the major mile markers on the paths to research commercialization at UMaine**

IP Commercialization	Collaboration with External Partners
<b>Step 1</b>	
File an invention disclosure	Understand what you have to offer
<b>Step 2</b>	
Evaluate commercialization potential	Establish and grow a relationship with an external partner
<b>Step 3</b>	
Protect your idea	Organize your offering into a customized solution
<b>Step 4</b>	
Determine the best path to make it real	Finalize agreement
<b>Step 5</b>	
Get going!	Get going!

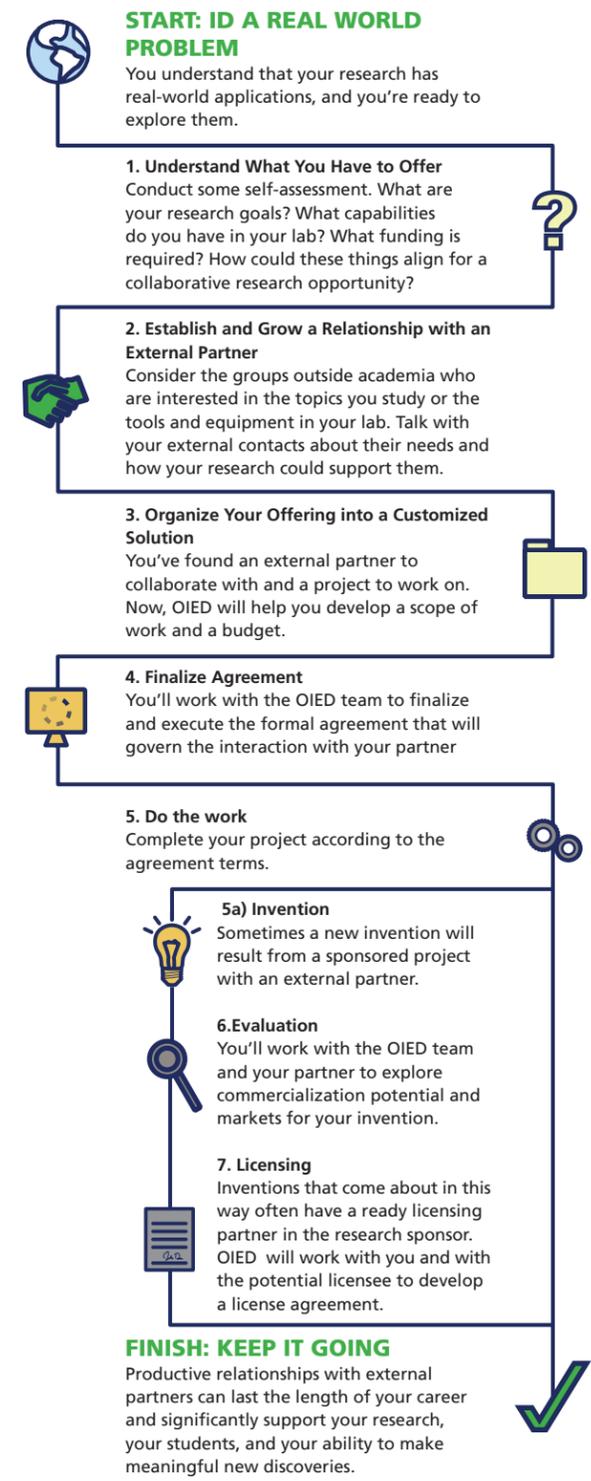
**Let's get started!**



**Option 1: IP Commercialization (Classic Tech Transfer)**



**Option 2: Collaboration with External Partners**



# IP Commercialization

There is more to explain about the classic commercialization path, so we'll begin our journey there.

## STEP 1: DISCLOSING YOUR INVENTION

So, you have an idea or a research discovery that you believe might be suitable to commercialize – the very first thing you should do is notify our office by submitting an invention disclosure. This is a very simple process that will save you significant time down the road.

### What is an invention disclosure?

An invention disclosure is a formal and confidential written description of an invention or development that is provided to OIED. The disclosure should list all sources of support and include all of the information necessary to begin pursuing protection, marketing, and commercialization activities. Based on the invention disclosure and inventor input, OIED may generate a non-confidential description of the invention to assist in marketing the technology. Once potential partners have been identified and confidentiality agreements have been signed, more detailed exchanges of information can be made.

### Why submit an invention disclosure?

The University of Maine System Policy Governing Patents and Copyrights (linked in full at the back of this guide) requires invention disclosures so that the university may assess inventions for potential commercialization and meet its obligations to government and other funding sources. When you disclose an invention to OIED, it starts a process that could lead to the patenting and/or commercialization of the technology. The commercialization process often involves initiating the legal and patent protection process and working to identify outside development partners. If government funds were used for your research, additional information must be reported to the sponsoring agency. Similar requirements often exist for other types of sponsored projects.

### When do I submit an invention disclosure?

You are required to submit an invention disclosure for any potentially patentable invention or discovery if you used federal funds, other external funding, or UMaine facilities and materials, and you are encouraged to submit a disclosure for all other inventions and developments that you feel may solve a problem and/or have value. **Submitting a disclosure should ideally occur well before presenting the discovery through publications, abstracts, poster sessions, conferences, press releases, or other communications.**

Presentation or publication of an invention in any form before filing for patent protection may restrict or eliminate the ability to obtain a patent, particularly outside of the United States.

Be sure to inform OIED of any imminent or prior presentation, lecture, poster, abstract, website description, research proposal, dissertation/thesis, publication, or other public presentation that includes the invention. If you're uncertain or have questions, contact OIED anytime.



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

In short, yes. OIED considers it essential to protect academic freedom and ensure that faculty and researchers can freely publish information related to their scholarship and research activities. However, since valuable patent rights may be affected or even invalidated by any public disclosure activities, it is best to submit an invention disclosure well in advance of communicating or disclosing your invention to people outside the UMaine community. In addition, there are significant differences between the United States and other countries as to how early publication affects a potential patent and how damaging a public disclosure can be to invention patentability. Once publicly disclosed (published or presented in some form), an invention may have zero or at best minimal potential for patent protection outside of the U.S.

Within the United States, prior disclosure within one year of patent filing does not necessarily eliminate patentability, but the ultimate value of a patent could be severely damaged, even within the United States, if it is not filed prior to any public disclosure.

Be sure to inform OIED of any imminent or prior presentation, lecture, poster, abstract, website description, research proposal submission, dissertation/thesis, publication, or other public presentation including the invention and we can help to ensure that it is protected in a timely manner that does not restrict your ability to publish or discuss your invention publicly in any way. OIED can also help to verify if any pre-publication review is required as a result of your collaborative research agreement and comply with any such requirement.

More information on this question is available in the section on patents.

### What about publishing results created under collaborative research agreements?

The ability to freely publish research results is fundamental to UMaine's mission as an academic research institution. Under a collaborative research agreement, the sponsor may be afforded a short period of time to review a pending publication or disclosure to protect their own confidential information or to allow the protection of certain rights to intellectual property, but collaborators are not provided with rights to unduly delay or prevent publication.

### How do I submit an invention disclosure?

Submit your invention disclosure using OIED's online portal, Sophia. The Sophia link is <https://umaine.wellspringsoftware.net/>, and you'll login with your Maine.edu credentials. You can access the invention disclosure form by clicking "Invention Disclosure" in the gray "Tasks" box on the top right of the Sophia home page.

### Whom do I contact if I have questions?

To discuss an invention disclosure, contact James Beaupré ([james.beaupre@maine.edu](mailto:james.beaupre@maine.edu)) or Christopher Fasel ([christopher.fasel@maine.edu](mailto:christopher.fasel@maine.edu)).

### Who is Sophia?

Sophia is OIED's online portal and the hub we use to document commercialization efforts. Need to make invention disclosure? Sophia. Need to set up a new project with an external partner?

Sophia, while not a person, will be key to your commercialization journey at UMaine.

Get to know Sophia at: <https://umaine.wellspringsoftware.net/>



## STEP 2: EVALUATING COMMERCIALIZATION POTENTIAL

Learning about the market potential for your invention (and what will be required to actually translate it from a lab discovery to something that can be used in the real world), is perhaps the most important step in the commercialization process. What you learn here will determine your actions going forward, and you will be deeply involved throughout this step. Evaluating market potential is a multilayered process that takes time and will require you to think differently about your invention and consider feedback from different sources. It is enlightening, though not always easy. As always, we're here to help (and we think this is the fun part).

### What happens first?

Once you have submitted an invention disclosure, OIED will undertake a technical evaluation to consider the unique features/benefits of your innovation, and what proof is necessary to demonstrate those benefits. We'll also explore the innovation's development status, also known as the technology readiness level (TRL). Based on that, we'll think about next steps for technical development, what resources are required (resources can include money, people, time, partners, equipment, etc.) and what plans are in place to obtain those resources.

Through that process, we'll talk with you, and together we'll come up with a plan to continue the evaluation process if the innovation shows promise for commercialization.

From here, OIED will help you evaluate market potential.

### How do you evaluate market potential?

Over the past several years, OIED has developed a series of programs designed to help you uncover the information you need to decide how (or if) to move toward commercialization. These programs, summarized briefly below (with more information available in the helpful links section at the back of this guide), build on one another and also feed into national programs that will help you collect the skills and information you'll need to continue developing your invention for real-world applications.

#### 1. Commercialization Training Series

For faculty, staff and graduate students interested in the commercialization process (at any stage), we recommend starting with our Commercialization Training Series. Offered throughout the academic year, these professional development workshops provide an overview of different topics related to commercialization at UMaine and are an ideal first step.

#### 2. I-Corps Site Program

UMaine's I-Corps site program will help you zero in on key market segments. The six-week I-Corps program offers grant funding for customer discovery activities and dedicated coaching that can help you identify the market opportunity for your STEM-based research (or research in other disciplines that has a technology application). UMaine's site program serves as a feeder for both the MIRTH accelerator program and the National I-Corps program (an expanded version of UMaine's site program during which teams perform at least 100 face-to-face interviews with potential customers and partners to evaluate product-market fit and their wider business model).

#### 3. MIRTH Accelerator

UMaine's I-Corps program is a pre-requisite for participation in MIRTH, an accelerator program designed specifically to develop UMaine research innovations into marketable new products and services that may lead to new job creation and grow Maine's economy. MIRTH applies the accelerator model used in the startup world for technology transfer projects in the university ecosystem. During this intensive 16-week program, participants are guided through market analysis, intellectual property analysis, and business model development.

UMaine's Research Reinvestment Fund supports MIRTH activities. After participation in MIRTH, teams have a roadmap with clear pathways that could include:

- Creation of a startup
- License to a new or existing company
- Direct engagement with the end user

### This sounds like a lot of work – what is my time commitment for these programs?

Market evaluation is a time-consuming process, but well worth it. In addition to providing valuable information about your potential customers, going through it will give you a sense of the time commitment and effort involved in founding and running a startup company. This will be useful later as you consider whether to pursue a startup or licensing. Your personal involvement is essential to the process as you know your innovation best. Doing this evaluation can also help to inform your future research as you'll gain understanding about what solutions already exist and what solutions are needed.

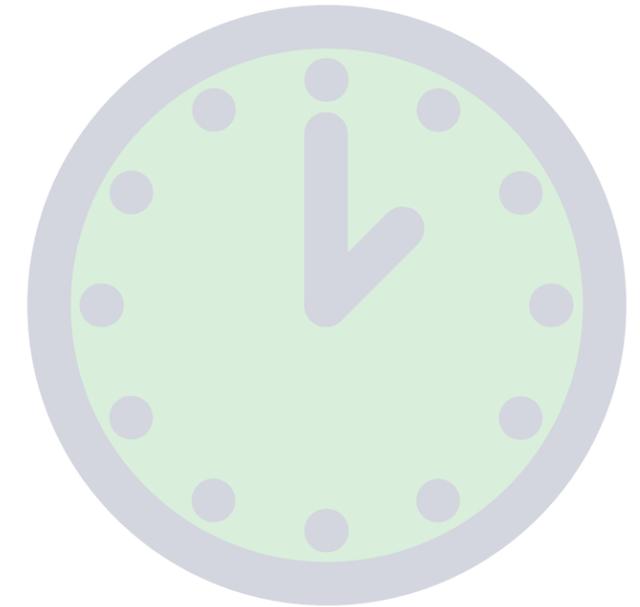
### Do I have to go through all the programs?

Not necessarily. The Commercialization Training Series is informational, but useful. If you're starting with an invention you intend to commercialize, you might skip right to UMaine's I-Corps site program, which will lead you directly into MIRTH. We consider UMaine's I-Corps program and MIRTH essential to this process. Participation in the National I-Corps program will only help you.

### Whom do I contact if I have questions?

To discuss UMaine's commercialization programs, contact Veena Dinesh ([veena.dinesh@maine.edu](mailto:veena.dinesh@maine.edu)).

### Notes:



### STEP 3: PROTECTING YOUR IDEA

The protection of intellectual property (IP) that may have commercial potential is a key step in this process. IP is a valuable intangible asset and its protection can help assure your competitive advantage in the marketplace. Protecting IP also helps to foster innovation and R&D by ensuring that inventors can reap the benefits of their work.

A quick note that IP protection and market evaluation often overlap on the timeline. It is important to have an understanding of the potential market for your invention before investing in IP protection, but the decision to protect IP may come before you complete your customer discovery steps – it all depends on your specific situation.

To help you navigate this process, OIED has an intellectual property specialist on staff, Christopher Fasel (christopher.fasel@maine.edu), who will work closely with you. He will help you formulate an IP strategy and connect you with OIED's external patent counsel. We work with outside attorneys to ensure access to skilled patent specialists across a wide range of technology areas. Inventors typically work collaboratively with outside counsel to draft patent applications and formulate responses to patent office queries, and Christopher will help you manage these interactions.

#### Types of Intellectual Property

##### Patents

A patent for an invention is the grant of a property right to the inventor, issued by the United States Patent and Trademark Office.

In the United States, the owner of an issued patent has the right to exclude others from making, using, selling, offering to sell, and importing the patented invention. This right is not automatic and may need to be actively enforced or defended by the patent owner.

A patent does not provide the owner with any right to practice a technology that falls under a broader patent owned or controlled by others. The specific claims of an issued patent define the legal scope of the owner's protectable invention.

##### Copyrights

A copyright is an intangible property right that can arise in an original work of authorship that is fixed in a "tangible means of expression." Common forms of "tangible means of expression" include books or other written media, and videos. Copyright protection attaches at the moment the original work of authorship is fixed in a tangible means of expression, whether the work is published or unpublished. Copyright can protect the way in which an idea is expressed, but not the idea itself. Similarly, for a computer program, the copyright may cover the source and object code, but not the processes that the code causes a machine to perform. Owning a copyright for an original work can be a valuable right, as in general only the owner of a copyright or an individual with the owner's permission can make copies of the work and distribute the work publicly through print or electronic media. For performing arts and visual art, in general only the copyright owner or someone with permission can publicly display or publicly perform the work. A U.S. copyright lasts a long time. For many works created in the U.S. after Jan. 1, 1978, the copyright is in effect for the author's life plus 70 years. Copyrights are registered by the Copyright Office of the Library of Congress.

##### Trademarks/Service marks

A trademark is a word, name, symbol, or device that is used in trade with goods to indicate the source of the goods and to distinguish them from the goods of others. A servicemark is the same as a trademark except that it identifies and distinguishes the source of a service rather than a product. The terms "trademark" and "mark" are commonly used to refer to both trademarks and servicemarks.

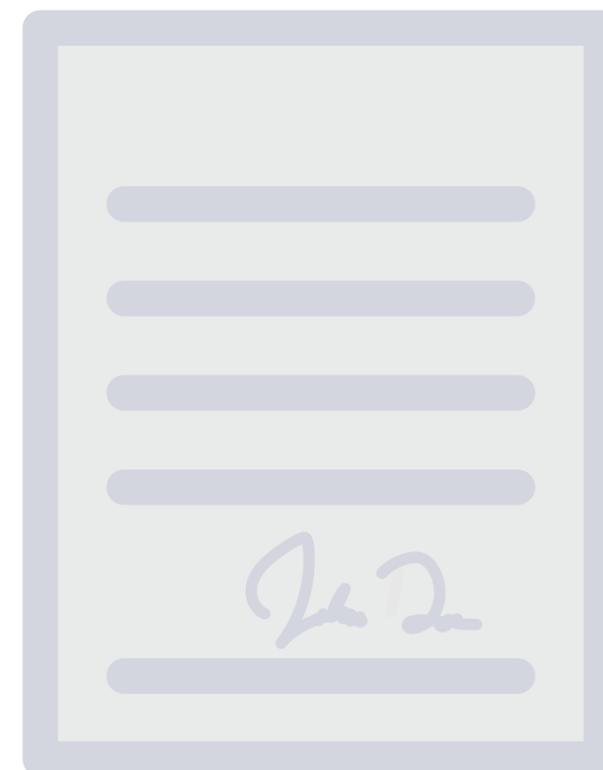
#### Related Terms

**Know-how** is distinct from patents, copyright, and trademarks because it generally refers to the technical knowledge and skill required to perform a task. It can also refer to unpublished data, information, protocols, techniques, methods, processes, procedures, trade secrets, chemical structures, and sequences or other types of knowledge. Know-how often resides with certain faculty members or other individuals and thus can sometimes be difficult to transfer to third parties and even harder to protect. In some cases, the know-how can be identified and/or reduced to writing, such as when it refers to protocols or certain data.

**Data** can be considered intellectual property, but is often considered to be a separate asset from registered intellectual property such as patents, copyrights, and trademarks. After a collaborative research project is complete, usually all sides of the collaboration share their results/data with the others, but they do not necessarily share ownership of the resulting patents, copyrights, trademarks, and trade secrets.

**Tangible research property** is defined more fully in the University of Maine System Policy Governing Patents and Copyrights, but in general, tangible research property or materials describe unique materials that are owned by and typically created at UMaine. Most often, tangible research property or materials refers to biological materials such as specialized or unique reagents, cell lines, plasmids, and vectors, but can also pertain to chemical compounds. Tangible research property may, or may not, be eligible to be protected by a U.S. patent.

For the purposes of this guide, we will devote the most attention to the patent process, but OIED can help you define and understand protection potential and UMaine policies related to any IP type. Please contact Christopher Fasel with all IP-related questions.



#### Patents

##### What type of subject matter can be patented?

Patentable subject matter includes processes, machines, compositions of matter, articles, some computer programs, and methods (including methods of making compositions, methods of using a process or material, etc.).

##### What is the United States Patent and Trademark Office (USPTO)?

The USPTO is the federal agency, organized under the Department of Commerce, which administers the patent system on behalf of the government of the United States. The USPTO employs patent examiners skilled in all technical fields in order to evaluate patent applications. The USPTO also issues federal trademark registrations.

##### What is the definition of an inventor on a patent and who determines this? Who should I include as an inventor on my patent?

Under U.S. law, an inventor is a person who takes part in the conception of the invention(s) claimed in the patent application. Accordingly, inventorship may change as the patent claims are changed during prosecution of the application. A person who only furnishes the funds to build or practice an invention, or is directed by another to perform a specific task or series of tasks, is generally not an inventor. The appropriate inventors on a patent application are determined by a registered patent attorney relying heavily on information and evidence presented by the potential inventors. Inventorship is a matter of U.S. Law (35 U.S.C § 116), and the determination of who is an inventor differs from whether someone should be a named author on a publication. Because "[c]onception is the touchstone of inventorship," each joint inventor must contribute to the conception of the invention. *Burroughs Wellcome Co. v. Barr Lab., Inc.*, 40 F.3d 1223, 1227-28 (Fed. Cir.1994)

## What is the patenting process?

Patent applications are generally drafted by a patent attorney or a patent agent (a non-attorney with a science education licensed to practice by the USPTO). OIED contracts with external patent counsel for the protection of inventions owned by the university, thus assuring access to skilled patent specialists across a wide range of technology areas. The patent attorney will typically ask you to review an application before it is filed and will also ask you questions about inventorship of the invention(s) claimed in the application. At the time an application is filed with the USPTO, the patent attorney will ask the inventor(s) to sign an Inventor's Declaration and an Assignment, which evidences the inventor's assignment to UMaine of the inventions claimed and any patent(s) that issue. Patent applications may be filed in the United States and/or in other countries, and the required paperwork may differ.

### Notes:

## Applying for a Patent

### What is a provisional patent application?

Since a patent may only be issued to the first inventor to file an application, it is important to secure an early filing date prior to public disclosure. A provisional patent application is a type of patent application that secures a filing date for the application, and reserves the applicant's right to file a later, more detailed nonprovisional application, without negatively impacting the length of the patent term if a patent ultimately issues. A provisional application automatically expires after 12 months.

**There is no such thing as a provisional patent – this term relates only to the type of application used to secure a filing date.**

### What is the difference between a provisional patent application and a regular or "utility" patent application?

U.S. provisional patent applications can provide a valuable tool for preserving patent rights while allowing for further development and refinement of the claimed invention. This useful feature of provisional patent applications occurs because the application preserves an inventor's priority filing date, but the provisional patent application is not examined during the year in which it is pending. A regular non-provisional application must be filed within one year of the provisional filing in order to receive benefit from its earlier filing date. However, an applicant only receives the benefit of the earlier filing date for material that is adequately described and enabled in the original provisional application.

## Process for Obtaining a Utility Patent

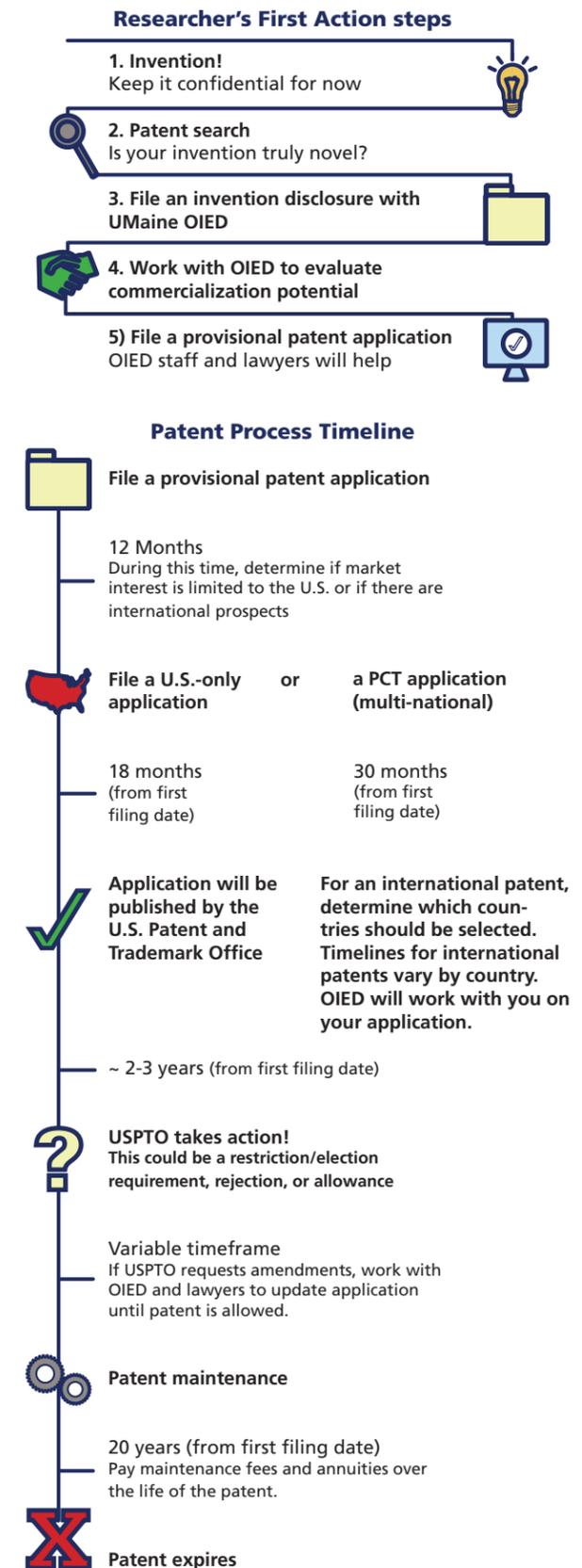
The graphic at right describes the basic steps in the patent application process. In the United States, this process can be expedited via a fee to take no more than 12 months. Normally, a patent issues between three and six years after the application is filed.

Currently, the average utility patent application remains pending for about three years, although inventors in the biotech and computer fields should plan on longer waits. If the utility application is filed in the U.S., depending on the type of technology, the patent attorney will receive written notice from the USPTO in 1.5-2.5 years or longer as to whether the application and its claims have been accepted in the form as filed. More often than not, the USPTO rejects the initial application because either certain formalities need to be corrected, or the claims are not patentable over the "prior art" (anything that scientists in the field have made or publicly disclosed in the past). The letter sent by the USPTO is referred to as an Office Action. If the application is rejected, the patent attorney must file a written response, usually within three months, and using the advice and assistance of the inventors. Generally, the attorney may amend the claims and/or explain why the USPTO's position is incorrect. This procedure is referred to as patent prosecution.

Often it may take up to two USPTO Office Actions and two responses by the patent attorney — and sometimes more — before the application is resolved. The resolution can take the form of a USPTO notice that the application is allowable; in other words, the USPTO agrees to issue a patent. During this process, input from the inventor(s) is often needed to confirm the patent attorney's understanding of the technical aspects of the invention and/or the prior art cited against the application.

Patent applications are kept confidential for a period of time, but then are published, typically 18 months after the first application is filed. After an application is published, the full application and information about prosecution can be found on the Patent Office website (links at the back of this guide).

Once a U.S. patent is issued, in general, it is enforceable in the United States for 20 years from the initial filing of the non-provisional application or PCT application, assuming that USPTO-mandated maintenance fees are paid during that 20-year period. (There are some exceptions, particularly involving inventions in the pharmaceutical fields; contact OIED for more specific information about your invention and/or patent.)



## Should I protect my idea outside the U.S.?

We will help you assess this depending on your specific circumstances. Foreign patent protection is subject to the laws of each country, although in a general sense the process works much the same as it does in the United States. In most foreign countries, however, an inventor will lose any patent rights if the invention is publicly disclosed prior to filing the patent application. In contrast, the U.S. has a one-year grace period which may allow for some protection of patent rights for publicly disclosed inventions.

## What is the process for international protection?

An international agreement known as the Patent Cooperation Treaty (PCT) provides a streamlined filing procedure for most industrialized nations. A PCT application preserves the applicant's right to file in domestic and certain foreign jurisdictions. For U.S. applicants, a PCT application is generally filed one year after the corresponding U.S. application (either provisional or regular) has been submitted. Eighteen months after the PCT is filed (30 months after the provisional is filed), the application must be filed in the national patent office of any country in which the applicant wishes to seek patent protection.

The PCT provides two main advantages. First, it delays the need to file costly foreign applications until the 30-month date, generally providing the applicant with ample opportunity to further develop, evaluate, and/or market the invention for licensing.

Second, the International preliminary examination often allows an applicant to get early feedback about patentability of the invention.

An important international treaty called the Paris Convention permits a patent application filed in a second country (or a PCT application) to claim the benefit of the filing date of an application filed in a first country. However, pursuant to this treaty, these so-called "convention applications" must be filed in foreign countries (or as a PCT) within one year of the first filing date of the U.S. application.

## Can a provisional patent application, regular utility patent application, or PCT application be enforced or used to exclude others from practicing my invention?

No. Only a validly issued patent can be enforced or used to exclude others from practicing the claimed invention. Patent applications cannot be enforced.

## Why does UMaine protect some intellectual property through patenting?

Patent protection is usually highly desirable for a potential commercialization partner (licensee) because it can protect the commercial partner's often sizable investment required to bring the technology to market. However, not all inventions are patentable or justify the significant time, expense, and effort required to seek patent protection. OIED carefully reviews both the patentability and commercial potential of an invention before investing in the patent process.

## Who decides what gets protected?

OIED and the inventor(s) will often jointly consider relevant factors necessary to make decisions relating to the potential filing of a patent application. If your invention was made using external research funds, OIED may also consult with the funder(s). Ultimately, however, OIED makes the decision as to whether to file a patent application, seek another form of legal protection, or decline to pursue through OIED. If OIED declines to pursue a patent for a particular technology, usually the inventors are granted the right to do so at their own expense.

## What is the cost of obtaining a patent?

Filing and prosecuting a regular U.S. patent application through to issuance can cost between \$15,000 and \$40,000, on average. Filing applications and obtaining issued patents in other countries may cost \$30,000-\$40,000 or more per country per application, on average. Also, once a patent is issued in the United States or in foreign countries, certain maintenance fees are required to be paid every few years, to keep the patent valid and enforceable.

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

If you created the invention under a collaborative research or consulting agreement with a company, OIED will need to review that contract to determine ownership and other rights associated with the contract to determine the appropriate next steps. Should the technology be jointly owned with another academic institution, UMaine will usually enter into an Inter-Institutional Agreement that designates one of the institutions to take the lead in protecting and licensing the invention, and provides for sharing of expenses and profits.

If the technology is jointly owned with a company or foundation, or in some cases if a company or foundation funded the university research but did not participate in the research that led to the invention, OIED will consult with the company or foundation to determine the appropriate patenting and licensing strategy.

Most of the time, these agreement terms are negotiated by OIED at the beginning of the research collaboration or research funding, before the invention actually occurs.

## Will the university initiate or continue patenting activity without an identified licensee?

On the basis of its evaluation, the university may elect to accept the risk of filing and protecting a patent application without an identified licensee. After university rights have been licensed, the licensee generally pays the patenting expenses that have been incurred up until the time of license (historical costs) and any patent expenses from the time of license forward (ongoing expenses).

The university sometimes decides to cease further patent prosecution and expense after a reasonable period of attempting to identify a licensee has transpired or if it is determined that it is not possible to obtain commercially valuable issued claims from the USPTO. If this occurs, the inventors are usually given the option to continue with prosecution or patent maintenance at their own expense.

## What about Retained Rights?

Pursuant to the Bayh-Dole Act, UMaine is required to retain certain research rights to continue to use licensed intellectual property where federal funding has been utilized in the development of such intellectual property, and to reserve rights – also known as march-in rights – for the federal government to exploit the IP under certain circumstances. In addition, it is UMaine's policy to retain certain research rights in all of its licensed intellectual property, to enable further research and education, even if no federal funding was used in the creation of the licensed intellectual property.

Furthermore, UMaine generally retains the right to share its "retained rights" in such licensed intellectual property with other non-profit organizations and universities for non-commercial research and educational purposes. This "retained right" may allow a researcher who leaves UMaine for another university to continue research related to the invention at a new university, while the ownership rights in the original licensed invention remain at UMaine.

## Notes:

## IP Revenue

### How are license revenues from intellectual property distributed?

In summary: for the first \$100,000 of cumulative net income, 50% will be distributed to the inventors and 50% will be retained by UMaine; and for cumulative net income in excess of \$100,000, 40% shall be distributed to the inventors and 60% will be retained by UMaine.

License revenues from UMaine-owned intellectual property (including patents, patent applications, know-how, copyrights, trademarks, and trade secrets) are distributed according to the University of Maine System Policy Governing Patents and Copyrights. Revenues from license fees, royalties, and equity — less any unreimbursed patenting, licensing expenses, and certain types of other qualifying costs — are shared with inventors according to the distribution formula set forth in the applicable policy. Please refer to the Policy Governing Patents and Copyrights for the specific terms regarding how revenues, expenses, and payments to inventors are calculated.

### What if I personally receive equity (stock) from a company?

Under the Intellectual Property Policy, inventors who receive equity or other shares of ownership from a licensee exceeding 10% of the ownership interest in said licensee are generally required to waive their inventor's interest in their share of profits received by UMaine from that licensee.

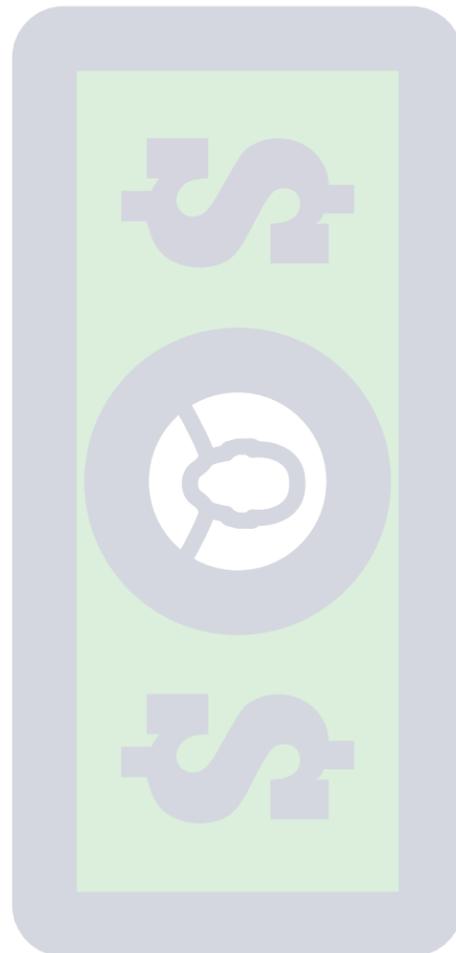
### What are the tax implications of any revenues I receive from UMaine?

Income distributed from license agreements to inventors are reported on Form 1099-Misc as Royalties. We strongly encourage you to consult your own tax adviser for specific advice and guidance.

### Whom do I contact if I have questions?

To discuss IP questions, contact Christopher Fasel (christopher.fasel@maine.edu).

### Notes:



## STEP 4: DETERMINING THE BEST PATH TO MAKE IT REAL

So, your innovation has market potential and you've protected the IP – now what?

Your two best-defined options are to form a startup and develop the project yourself OR seek a partner who will license and further develop your IP.

Three basic questions will help to identify the best approach, and OIED will work closely with you to figure it out.

1. What do you want?
2. What level of involvement is realistic for you?
3. Do you have access to funding and other necessary resources?

As mentioned previously, startups offer more direct control and long-term financial upside if you are successful, while licensing allows you to take a hands-off approach and collect revenue if your licensee is successful. Startups also require significantly more work and personal involvement. A third option, in certain situations, is direct development for the end user. This may be appropriate when the market for the technology is very small or there is limited expertise outside the institution that can help it grow. For now, we'll examine startups and licensing.



## Startups

### What is a startup company?

A startup is a new business entity formed to commercialize inventions through the development and eventual sale of products or services.

### Why consider the startup journey?

A few key factors when considering whether to form and launch a startup company are:

- The innovation is not an incremental improvement on something that already exists
- There is evidence of sufficient market opportunity
- There is potential for expanded product lines
- The innovation is immature and needs further development
- The invention team is critical to future success

- UMaine and inventors agree it is the best route to market
- There is revenue or funding potential sufficient to sustain and grow a company
- The startup commercialization pathway stimulates economic development in the region

The OIED team can help to evaluate these and other factors to decide whether a startup is the ideal route to market. The choice to establish a new company for commercializing UMaine-owned intellectual property is typically a mutual decision made by OIED and the inventors of the technology. A faculty or staff member can establish a business without the assistance of UMaine as long as the faculty member and the business otherwise are compliant with UMaine's policies. A business created in partnership with UMaine, or through independent means, must still take a license to any UMaine-owned IP it intends to use.

## Types of Startups We Work With

### 1. Employee-led startup with UMaine-owned IP

When an employee decides to take an equity ownership stake or has a significant financial interest in the startup company that desires to commercialize technology owned by UMaine, they need to complete OIED's Startup Checklist. This checklist (linked at the back of this guide) ensures that all approvals have been obtained, prior to the final execution of any license agreement between such startup company and the university. Employees will also have to submit a conflict management plan when required by policies. Conflict awareness and management is especially important for employee-led startups.

Employees permitted to engage in outside entrepreneurial activities continue to be responsible for the performance of all their university teaching, research, and service obligations. If an employee is unable to meet these obligations, he or she must either reduce outside activities or request a reduction of appointment or other approved leave from the university.

The startup must obtain a license from UMaine to practice the intellectual property rights. These licenses include performance milestones that, if unmet, could result in termination of the license agreement.

#### What conflicts should I be aware of?

Conflicts may arise when a university employee has significant financial interest in a company, ownership or otherwise. OIED's Startup Checklist will walk you through potential areas of conflict, and employees should also refer to the Office of Research Compliance (ORC) on the need for declaring any significant financial interest that may present a conflict of interest in relationship to externally sponsored projects.

Disclosures of this nature must be made prior to the submission of a proposal for funding. ORC is responsible for administering the Financial Conflict of Interest (FCOI) Policy. Examples of potential conflicts include the treatment and roles of students and trainees, supervision of individuals working at both UMaine and a licensee company, use of space and equipment for company benefit, etc.

#### When should I seek guidance on conflicts?

Addressing conflicts early protects you and protects the institution. Because a finding of an FCOI Committee may have considerable implications related to your participation in research, you should contact ORC early in the process if you currently have, or anticipate that you may have, a financial relationship with a company that could affect or be affected by the conduct or outcome of your research.

The Startup Checklist can help you anticipate potential conflicts that may arise later and OIED staff can help you develop a plan for managing those conflicts.

#### Can I do contract work for my startup company at UMaine?

Yes, with a proper conflict of interest mitigation plan an employee-held company can do work at the university.

#### Notes:

### 2. Startups based on UMaine-owned IP (no employee ownership)

Intellectual property owned by UMaine can be licensed by new or existing startups to develop and sell licensed products/services. In some cases, the invention team at UMaine may decide not to take fiduciary roles (e.g. board seats, officer positions, full-time employment arrangements, etc.) at companies that were created to commercialize technology or research developed at UMaine. Faculty inventors do typically serve as advisors or consultants for the company, often chairing or participating on a Scientific Advisory Board, particularly when the technology is immature or has platform applications.

### 3. Student-led startups

The OIED team will work with UMaine students choosing to start their own businesses. Students are provided with business coaching services, free office space at the student business incubator housed at the Foster Center for Innovation and access to mentors and resources on campus. The Innovation Center hosts entrepreneurship-related events, student meet-ups and competitions every semester. Students can also apply to be considered for StartUp Lab, an Innovation Engineering course designed for students committing to taking their idea to market.

### 4. Employee-led startups not related to research at UMaine

Perhaps you want to start a company unrelated to any work done at UMaine. OIED offers a variety of new venture and business incubation services to such startups.

### What new venture and business incubation services are available through UMaine?

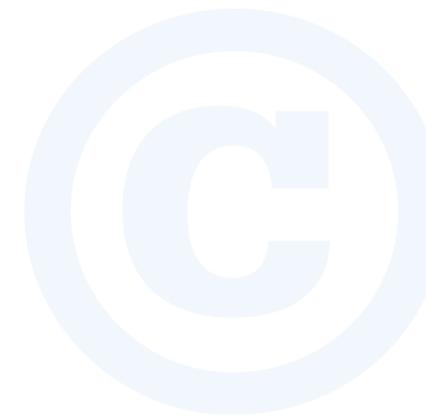
Previously mentioned programs, such as I-Corps and MIRTA (Pg. 8), provide important resources related to starting a business, but many other programs are available through OIED and our network of statewide partners.

First, OIED provides support to ventures through its business incubation program. Employee- and student-led startups can access the following services for free:

- Business coaching
- Office space on campus or with partner business incubators in the state
- Connection with UMaine's mentor network
- Priority intern assistance

### Resources and Funding Mechanisms

- Previously mentioned UMaine programs (I-Corps, MIRTA)
- Top Gun Entrepreneurship Accelerator Program (statewide, Bangor-region cohort run by OIED)
- Scratchpad Accelerator Program (Bangor-based seed accelerator program)
- Maine Technology Institute (state funding assistance for Maine companies)
- SBIR/STTR (Federal funding programs)
- Angel and venture capital funding (private funding options)
- Innovate for Maine (OIED-run fellowship program that can provide talent support)



## Licensing

If the startup route does not appeal to you or is not appropriate in your situation, licensing your invention to another company (either one that already exists or a startup formed by external interests for the purpose of commercializing your IP), is a good option.

Of course, in order to license your IP, you first need to find a licensing partner. This is where industry collaboration can be especially helpful – if you already are collaborating with industry on your research, often there is a ready-made licensee for the discoveries you might make. If you're not collaborating with industry, it can be more difficult to find a licensing partner, but there are things you can do (described below) to help.

### What is a License Agreement?

License agreements describe the rights and responsibilities related to the use of intellectual property developed at UMaine by the party obtaining the license. University license agreements usually stipulate that the licensee should diligently seek to put the intellectual property to commercial use for the public good and provide a reasonable return to UMaine. License agreements can be exclusive, meaning that only that licensee has rights to exploit a particular technology in the licensed field, or non-exclusive, meaning that more than one licensee can obtain a license to the same intellectual property in the same field of use.

### What kinds of things can be licensed?

Generally, licenses include a grant of rights to a form of intellectual property such as an issued patent or pending patent application, a copyright, a piece of software, a device prototype, a tangible research material or reagent, a defined data set, etc.

### How is a company chosen to be a licensee?

A licensee is chosen by OIED in consultation with the inventors, based on its ability to commercialize the technology for the benefit of the general public. Sometimes an established company with experience in similar technologies and markets is the best choice. In other cases, the focus and intensity of a startup company is a better option.

### What can I expect to gain if an invention I made is licensed?

Most inventors enjoy the satisfaction of knowing their inventions are being developed for the benefit of the general public. New and enhanced relationships with businesses are another outcome that can augment one's teaching, research, and consulting activities. In some cases, additional collaborative research funding and support may result from the licensee. Additionally, as required by the Bayh-Dole Act and per university policy, a significant portion of any net income from a patent license is shared with the inventor(s). For additional information on how licensing income is distributed, please see the University of Maine System Statement of Policy Governing Patents and Copyrights.

### What is the relationship between an inventor and a licensee, and how much of my time will it require?

Many licensees request, and sometimes require, the active assistance of the inventor to facilitate their commercialization efforts, at least in the early stages of development. This assistance can range from infrequent, informal interactions to a more formal collaboration. Working with a new business startup in contrast to working with an established company can, and often does, require substantially more time, depending on your role in or with the company and your continuing role within the university. Under all circumstances, your participation with a startup or well-established company is governed by university conflict-of-interest policies.

### Will you help me find a licensee?

OIED can help, but your active participation will be required. As an inventor, you have an opportunity to connect with potential licensees through conference presentations, trade shows, and the customer discovery component of programs such as I-Corps and MIRTA. These can all be great routes to identify potential licensees, and you are your invention's best advocate. OIED does not have the staffing resources to aggressively market UMaine-owned IP, but we do connect regularly with industry across the state and the world. The more closely you work with our office and the more information you provide, the more we can do to help identify potential connections that could turn into licensing opportunities.

### What about licensing research materials?

Research materials are proprietary materials developed in the course of research that can include but are not limited to biological materials, chemical compounds, and even some types of software or data. Research materials can help facilitate scientific development and the creation of new inventions. When shared with a commercial entity, a license agreement is typically used to protect any associated intellectual property rights and provide commercialization income. OIED can help you with this.

### May I use research materials created by others?

Yes, if the other party is willing to share materials and if any conditions the provider may impose are acceptable to you and to UMaine. It is important to carefully document from whom and under what conditions you obtained materials so that we can help to determine if your use may impact the ownership rights of a subsequent invention or technology.

### Will I be able to share research materials created in my research with others?

Yes. UMaine requires the use of an outgoing Material Transfer Agreement (MTA) for the sharing of materials developed at UMaine to any outside for-profit or not-for-profit party.

Sharing any materials with commercial colleagues or sharing human-derived materials with commercial or academic colleagues may require the use of additional terms and conditions. All requests for outgoing MTAs should be made through Sophia.

### Whom do I contact if I have questions?

For general startup and licensing questions, you can reach out to James Beaupré (james.beaupre@maine.edu), Christopher Fasel (christopher.fasel@maine.edu), or Veena Dinesh (veena.dinesh@maine.edu).

## STEP 5: GET GOING!

Congratulations! Whether you've chosen to form a startup or license your invention, you're now well on your way.

In the case of a startup, OIED will remain a useful partner. Our office has connections with business incubator programs and other resources throughout the state (and beyond) that can support you as you sustain and scale. Not only that, but we can facilitate ongoing research and service support through the university – read on through the next section on collaboration with external partners for information you may find useful.

If the university has decided to pursue a licensing agreement, the final steps involve executing the agreement and continuing to work with the licensee for ongoing R&D and other needs. Once you have licensed an innovation related to your research, the licensee can become a valuable partner to support your work going forward. OIED will work with both parties to help manage the license.



### Notes:

# Collaborating with External Partners

Now that you've seen the longer paths to developing a novel invention for commercialization, it's time to learn about the more straightforward route (one that can also lead to novel inventions and ready licensing partners for those inventions). If you have no desire to form a startup or participate in classic forms of tech transfer, but you are interested in solving real-world problems and finding additional funding sources to support your research, collaborating with external partners may be the ideal commercialization opportunity for you.

Within OIED, UMaine's Department of Industrial Cooperation (DIC) functions as a liaison between business and industry and the university, coordinating formal agreements that make UMaine facilities, equipment, and research expertise available to external clients. DIC's involvement serves to maintain the integrity of UMaine's institutional mission and avoid conflicts with the private sector. DIC can help you formalize existing relationships with industry related to your work (including helping you assess potential opportunities and connecting you with new opportunities that may come through our office). By working with DIC, you will be able to leverage a much broader network of contacts across the state, the country and the world.

## STEP 1: UNDERSTAND WHAT YOU HAVE TO OFFER

If you've never thought about where your research expertise could add value or help solve problems in the wider world, this is where you should start. It's a useful exercise – we can prompt you through it – that will help you strategically approach opportunities for sponsored activity.

The first step is to think carefully about what interests you. Sponsored activity offers a way for you to accelerate the impact of academic research in the world we live in – what areas of your research have the potential to both make a difference and advance your academic interests and career? Is there a way you can educate a student along a masters or doctoral path that could facilitate that research?

## How do I quantify my expertise?

This is all part of the same self-assessment process. First, understand your education, your background, your fields of interest and how they intersect. What is the demand for your knowledge? Do you have the ability to solve a problem or a particular type of problem? Developing a base of know-how and experience that can be repeatedly applied to similar challenges can be helpful, both for developing further expertise and establishing a reputation as someone with expertise in this area.

## How do I know what tools in my lab are useful to outside partners?

Useful tools could include capabilities and technologies that aren't yet available or aren't widely available in the commercial sector in Maine or elsewhere. This could be a new technology, or perhaps a resource in which a single company would be unlikely to invest but where the state could support a sector or a group of companies. The tools in your lab combined with your research expertise or knowledge base can be a real asset.

## What are the limitations on what I can offer?

Your offering must be legal. It must follow established principles of research ethics. It must abide by UMS policies related to doing business with the private sector, which include not making guarantees related to your work. Finally, it must not directly compete with the private sector in Maine.

## STEP 2: ESTABLISH AND GROW A RELATIONSHIP WITH AN EXTERNAL PARTNER

The first step to formally collaborating with external partners is as straightforward as uncovering groups outside of academia who are interested in the topics you study or the facilities and equipment in your lab.

Who are they and why does your research area matter to them? What problems are they trying to solve? You probably already have a good idea, and likely have informal relationships with these groups. Talk with those people, try to understand their needs and wants.

## What should I know before I start working with external partners?

When you commit to conducting work for an external partner, they become your customer. These relationships, if productive for both parties, can last the length of your career and significantly support your research, your students, and your ability to make meaningful new discoveries.

Industry timelines tend to be tighter and more rigid than those in academia, and delivering timely results on a service contract is essential to the success of the relationship over the short and long term.

Timely turnarounds are a key element of customer service in these relationships, but not the only one. Be friendly and communicate updates on your work often. While your contract agreement may include dedicated progress milestones, it's helpful to proactively update your partners more frequently and to be responsive when they contact you. Whenever possible, try to return calls and emails within 24 hours, even if your initial response is just an acknowledgment with a promise to respond in more detail later. Ask for feedback on your work and use the feedback your partner gives you. While these are common sense tips, good customer service is critical to building and maintaining a strong relationship with an external partner.

Recognize that you may not be the only researcher coordinating with a particular company at any one time. Your partners may be leveraging contacts in multiple parts of the institution simultaneously for different reasons, and you want to help ensure that their experience is uniformly positive.

Finally, remember that you are always representing UMaine, and that individuals outside the university will not distinguish between individual departments.

Your interactions with external partners can lay the groundwork for someone else to be successful or ensure that they never get the same opportunity.

## Do I need a Confidentiality/Non-Disclosure Agreement (NDA) to talk with an external partner?

You don't, but an NDA is helpful because it allows you to receive and share proprietary information with your prospective partner. The protections offered by an NDA allow for freer conversations that can help move negotiations forward. It's easy to request an NDA through our online management software, Sophia.

## What is the purpose of a Confidentiality/Non-Disclosure Agreement?

A confidentiality/non-disclosure agreement is typically mutual between the involved parties and acknowledges that content is confidential, proprietary, and should not be shared or published in any form. This type of agreement should be considered as part of any interaction with an external client to protect the parties even if the project doesn't develop as expected. The university has a standard mutual confidentiality/non-disclosure agreement that can be shared with a client, or DIC can initiate a review of a client's standard agreement for compliance. An important factor of confidentiality/non-disclosure agreements is the preservation of existing intellectual property. This type of agreement is formally between the university and the client and is signed by both parties and acknowledged by the PI.

## STEP 3: ORGANIZE YOUR OFFERING INTO A CUSTOMIZED SOLUTION

### How do I build a scope of work?

First, make sure you're directly addressing the needs that the partner has presented. Remember that the goal is to deliver an anticipated result, and your scope of work should reflect an appropriate path to deliver that specific result. That said, don't get too caught up in outlining every detail of your process – focus on the assigned deliverable for the partner, ensuring that you can meet their needs on their timeline. Industrial research is not peer reviewed, and setting a scope of work for an external customer is quite different than presenting a question that you'd like to answer purely for the sake of growing knowledge.

The three things you must include in any scope of work for sponsored activity are:

- 1) Timeline
- 2) Deliverables
- 3) Cost

### What is an appropriate timeline?

Timelines are developed mutually between the researcher and the customer in order to balance between your capacity to present the solution and the company's required time to implement the deliverable. More often than not, these timelines are significantly accelerated compared with traditional research timelines. Some projects involve long engagements (e.g. sponsored activity into a broad question or questions), others are quick turnarounds (e.g. fee-for-service testing). If you need assistance, DIC will work with you and your partner to set timelines for proposed projects.

### How do I know what to charge?

We'll help you build a budget using the DIC budget sheet (see link to full sheet at the back of this guide). Using the budget sheet, we can work with you to determine the amount of anticipated effort, materials, cost of testing that will be required and appropriately calculate what the university refers to as "fully burdened charges." Fully burdened charges are used to calculate fixed-price contracts and factor in fringe and appropriate indirect costs, where applicable, as required by UMS administrative practice letters. Most industry projects are considered "other" when being considered for indirect charge rates – that is, not fundamental research or instructional for credit – but

there are instances that might be considered instruction or research. Please contact us to discuss your specific case.

### The partner I'm working with has asked for a quote on the work – can I provide one? How?

Informal and non-binding quotes can be shared with a potential client and revised and edited until everyone comes to agreement. You can share informal and non-binding quotes in any way that you're comfortable. Quotes are formalized and made binding through the agreement process outlined in the next step (Formalizing an Agreement).

### What if I just want to consult in my spare time?

You may consult outside the university, but keep these factors in mind:

- 1) You may not use university facilities or equipment or enlist the help of students on outside consulting.
- 2) You are not covered by university insurance or liability when you consult on your own time.
- 3) You are required to report income related to such work according to IRS guidelines.
- 4) You should refer to the Associated Faculties of the University of Maine (AFUM) or UMPSA contracts regarding the reporting of outside employment to your department and supervisor.

### What are the benefits of consulting in coordination with the university?

Consulting in coordination with UMaine allows you to use university facilities and equipment, enlist the help of UMaine students and other staff and be covered by university insurance. The client will contract with the university for your expertise, and DIC will manage the administrative process and handle all paperwork. An added benefit is that your income from the project and any tax withholding will be handled through regular university payroll channels.

## STEP 4: FINALIZE AGREEMENT

Here, we'll walk through the different agreement types you might encounter and the process for initiating development of an agreement through our online management software, Sophia. After you've gone through the process for the first time, it's easy to set up new agreements in Sophia for future projects. DIC is always here to support you – remember, we manage the administrative process related to each project and will handle all the paperwork, including billing, on your behalf.

### Why do I need a formal agreement to collaborate with a company, group or individual outside the university?

An agreement is required by the UMS General Counsel in order to engage with an external partner. This protects you and protects the university, providing a legal framework to govern your interaction that:

- 1) ensures compliance with UMS policies as well as state and federal laws
- 2) preserves the right to academic publication for confidential work
- 3) protects you as the PI from personal liability
- 4) preserves the rights to any intellectual property generated as part of the collaboration

### What sorts of external collaborations would require a formal agreement?

There are several basic agreement types that should be considered when working with an external partner. Scenarios in which these agreements might apply include:

- Project work for domestic and international companies, communities, individuals, and non-profits
- Consulting/problem solving
- Training
- Fee-for-service work or testing
- Facilities use
- Collaborative Research & Development
- Sharing of research materials/results

It's important to note that not all agreements involve financial contributions from external partners. Some agreements simply govern exchange of information, materials, or mutually beneficial endeavors.

### Are there any agreement types DIC doesn't handle?

Due to reporting requirements, any collaboration that involves federal funding must be routed through UMaine's Office of Research Administration: <https://umaine.edu/ora/>

Any collaboration that involves a gift must be routed through the University of Maine Foundation: <https://umainefoundation.org/>

Procurement contracts are managed by UMS Procurement: <https://www.maine.edu/strategic-procurement/>

### What kinds of agreements are there?

There are several basic agreement types, some version of which will be involved in most project work. DIC will always work with you to tailor the agreement to suit the project. Common agreement types include:

- Confidentiality and Non-Disclosure Agreements (already explained in Step 2)
- Material Transfer Agreements
- Agreements for Services (consulting, fee-for-service, testing, etc.)
- Facility / Equipment Use Agreements (use of space, labs, tools, equipment etc.)
- Research Collaboration Agreements (fundamental and applied research, graduate students, etc.)
- Customer- or client-derived agreements

### What is a Material Transfer Agreement?

A Material Transfer Agreement governs the transfer in or transfer out of materials between the University of Maine and an external collaborator for use in research. Materials may include biological samples, chemicals, prototypes, or pieces of equipment. These agreements are typically only a few pages in length and address issues such as ownership of the transferred material and modifications and derivatives made by the recipient. They also may limit the use and further dissemination of the material by the recipient, address publication rights and confidentiality as well as rights to inventions and research results.

## What is a Service Agreement?

In these cases, a client contracts with the university for a specific service such as consulting an expert or some type of evaluation. Clients typically seek this type of arrangement because UMaine may have capabilities or equipment not otherwise available to the private sector in state. Fee-for Service or Testing Agreements can be standardized to meet a specification offered repeatedly or one-off and specialized, with a fee established per test, per sample, based on fixed price, or based on actual costs such as labor, consumables, equipment depreciation, and maintenance. There is no expectation of intellectual property related to these agreements. By state statute, UMaine cannot compete with the private sector in Maine, and DIC will help navigate this with you, as well as manage the process, budgets, invoices, etc.

## What is a Facility/Equipment Use Agreement?

A Facility or Equipment Use Agreement specifies terms and conditions by which a company and its employees can gain access to university facilities and/or equipment on a short-term basis. At UMaine, this type of agreement is commonly associated with equipment use at research centers, lab facilities, and start-up/incubation spaces. The agreement ensures that the collaborating party will be liable for any issues and protect the investment in the resource for future use.

## What is a Collaborative R&D Agreement?

A research collaboration agreement between an external client and the university tends to be larger in scope than any of the previously mentioned agreement types. It will often include milestones and go/no-go decisions. Both the company and the university often bring background intellectual property to the collaboration, and the agreement will specify terms related to the protection and commercialization of any intellectual property that may be developed. Often there is graduate student involvement, and publications related to the project are mutually agreed upon as part of the agreement. Specific project details and other factors dictate the terms of these agreements.

## The partner I'm working with wants to use an agreement that they drafted. Is that allowed?

Yes, DIC is happy to initiate a review of a client's proposed agreement for compliance. We may add or remove language as part of that process, which generally involves attorneys for UMaine working directly with lawyers who represent the external partner.

## May I negotiate an agreement with an external partner?

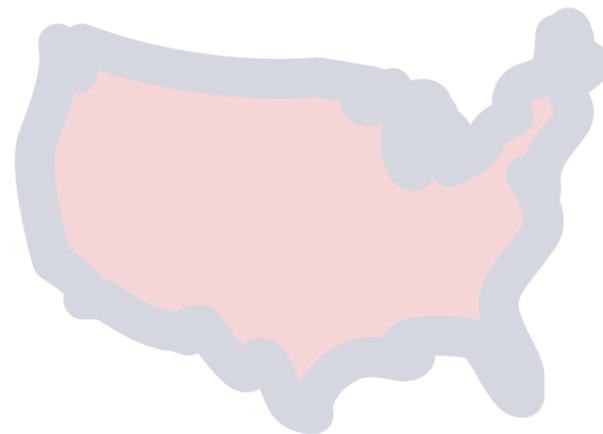
As noted previously, you can negotiate the scope of work and the budget, however the remaining terms of the agreement are negotiated by DIC with the assistance of UMS General Counsel.

## May I sign an agreement with an external partner?

No, only UMaine and UMS authorized signatories can bind the institution to a contract.

## How do I start the process to develop an agreement?

If you're initiating a project for the first time, call or email Director of Industrial Cooperation James Beaupré (207.581.1345 / james.beaupre@maine.edu) for a preliminary conversation and to walk through the process of using our Sophia management software to formally submit your project.



## STEP 5: GET GOING!

The logistics are taken care of, now you can go to work executing the terms of the agreement. Remember that we're always here to support you through the process if you have questions or concerns.

## How do I manage a conflict with an external partner?

As soon as you have any concerns about a potential conflict, reach out to DIC. We can help mediate conversations and resolve issues, especially if you involve us early on.

## What if I want to extend an agreement or the partner wants a change?

All agreements can be amended with mutually agreed terms at any point in time. Amendments can include, but are not limited to, extended timelines, budget-related changes, expanded or reduced scopes of work, and early terminations.

## How do I invoice the company?

The invoice schedule will be outlined as part of the contract or agreement and managed by DIC. You'll need to work with DIC to ensure that invoices are sent at the appropriate time – e.g., if a contract calls for billing upon completion, you'll need to notify us that you have completed the work – but you will not need to invoice anything yourself.

## What happens when I finish the work?

Once you have fulfilled your obligations to the partner under the terms of the agreement, all that's left is to notify DIC the work is done so that we can submit final invoices. After that, the agreement automatically sunsets.



# Conclusion

There you have it. After reading through this guide, we hope you have gained a better understanding of the many aspects of commercialization and the resources available to support you at UMaine. While we have tried to be as thorough as possible, we know we haven't addressed every possible scenario herein. As always, reach out to us with any questions you may have. At the very least, we hope you understand that OIED is here to enable all of your research to have the impact it should, and our most important mission is working with you to make that possible.

## Notes:

## Helpful links

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OIED website: <https://umaine.edu/econdev/>

Sophia: <https://umaine.wellspringsoftware.net/>

Helpful project and budgeting forms: <https://umaine.edu/econdev/forms/>

UMaine Startup Checklist: <https://umaine.edu/econdev/resource/university-of-maine-startup-checklist/>

Foster Center for Innovation: <https://umaine.edu/innovation/>

More UMaine commercialization resources: <https://umaine.edu/econdev/faculty-resources/idea-development-programs-resources/>

Office of Research Compliance: <https://umaine.edu/research-compliance/>

Office of Research Administration: <https://umaine.edu/ora/>

University of Maine Foundation: <https://umainefoundation.org/>

University of Maine System Full Statement of Policy Governing Patents and Copyrights: <https://www.maine.edu/board-of-trustees/policy-manual/section-209/>

UMS Procurement: <https://www.maine.edu/strategic-procurement/>

Associated Faculties of the University of Maine: <https://afum.info/>

Universities of Maine Professional Staff Association: <http://myumpsa.org/>

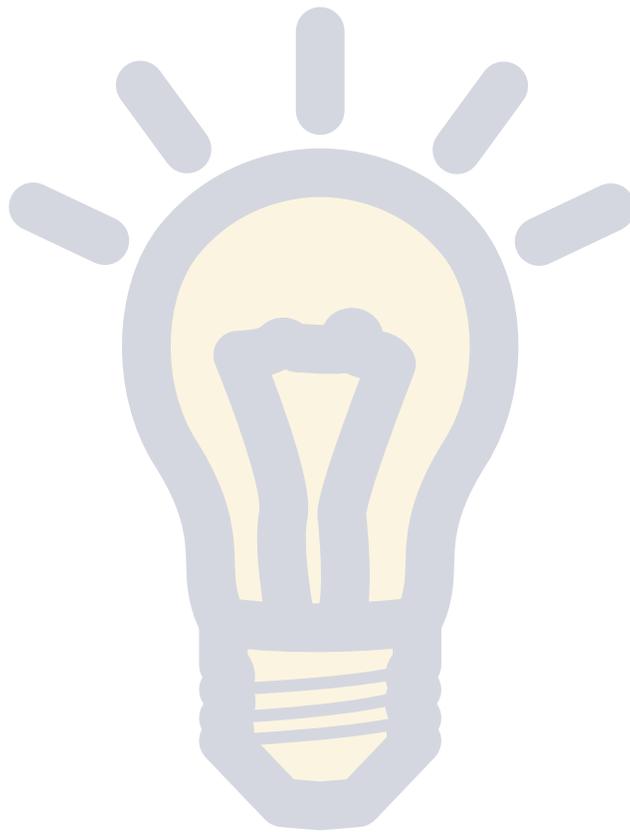
U.S Patent Office: <https://www.uspto.gov>

Google Patent Search: <https://patents.google.com/advanced>

## Acknowledgements

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