



WOODS HOLE
OCEANOGRAPHIC
INSTITUTION

AN INVENTOR'S GUIDE TO **TECHNOLOGY TRANSFER**

AT WOODS HOLE
OCEANOGRAPHIC INSTITUTION

[TECHTRANSFER.WHOI.EDU](https://techtransfer.whoi.edu)

OTT AT WHOI

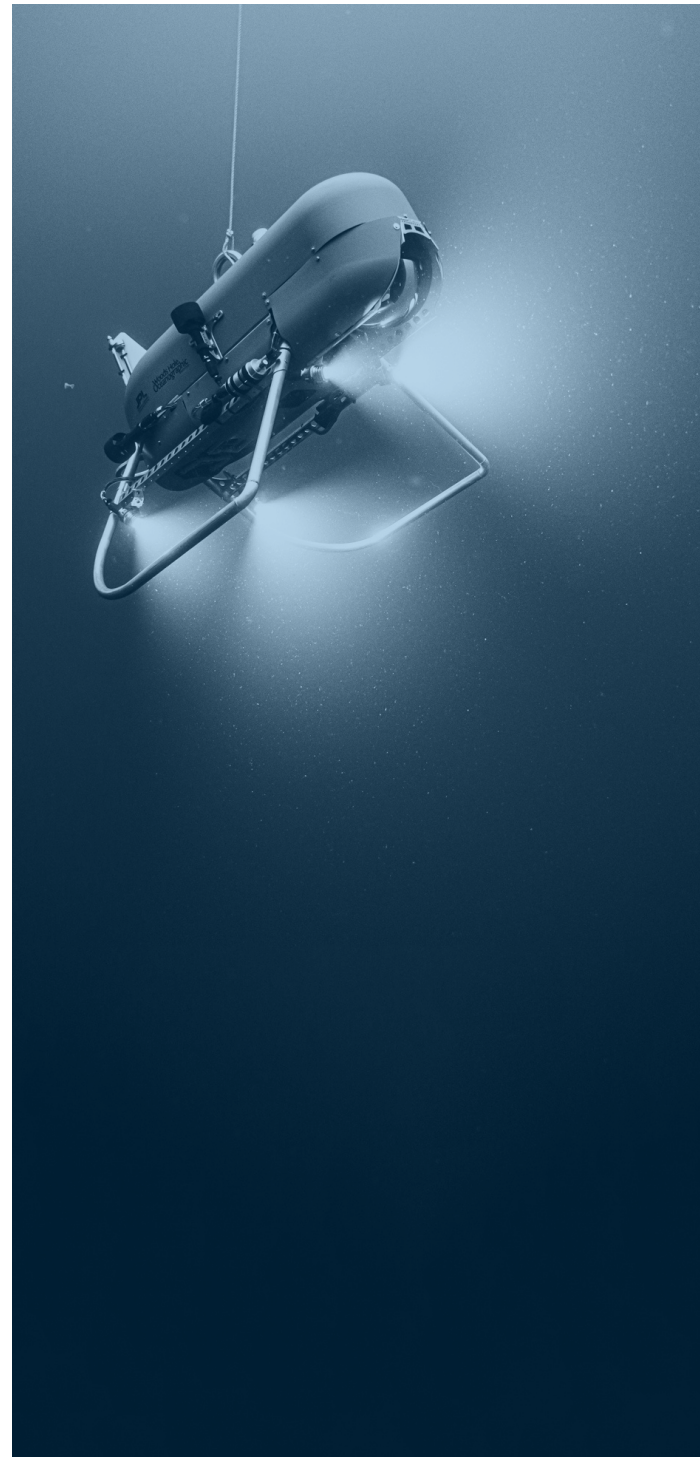
Connecting the leaders in ocean research and exploration with industry to advance research and amplify impact.

The Office for Technology Transfer (OTT) is dedicated to realizing the full impact of WHOI innovations. We do this in part by providing support, guidance, and helpful resources to WHOI staff and innovators. We understand that whether you are a first-time inventor, or seasoned entrepreneur, the process can be intimidating.

Whether speaking with industry for the first time, knowing when to disclose an idea to OTT, or understanding IP ownership and protection - we're here to help you understand what to expect from the process. This guide is designed to answer the most common questions from our research community. Please note that [WHOI IP Policy](#) supersedes any material presented in this guide.

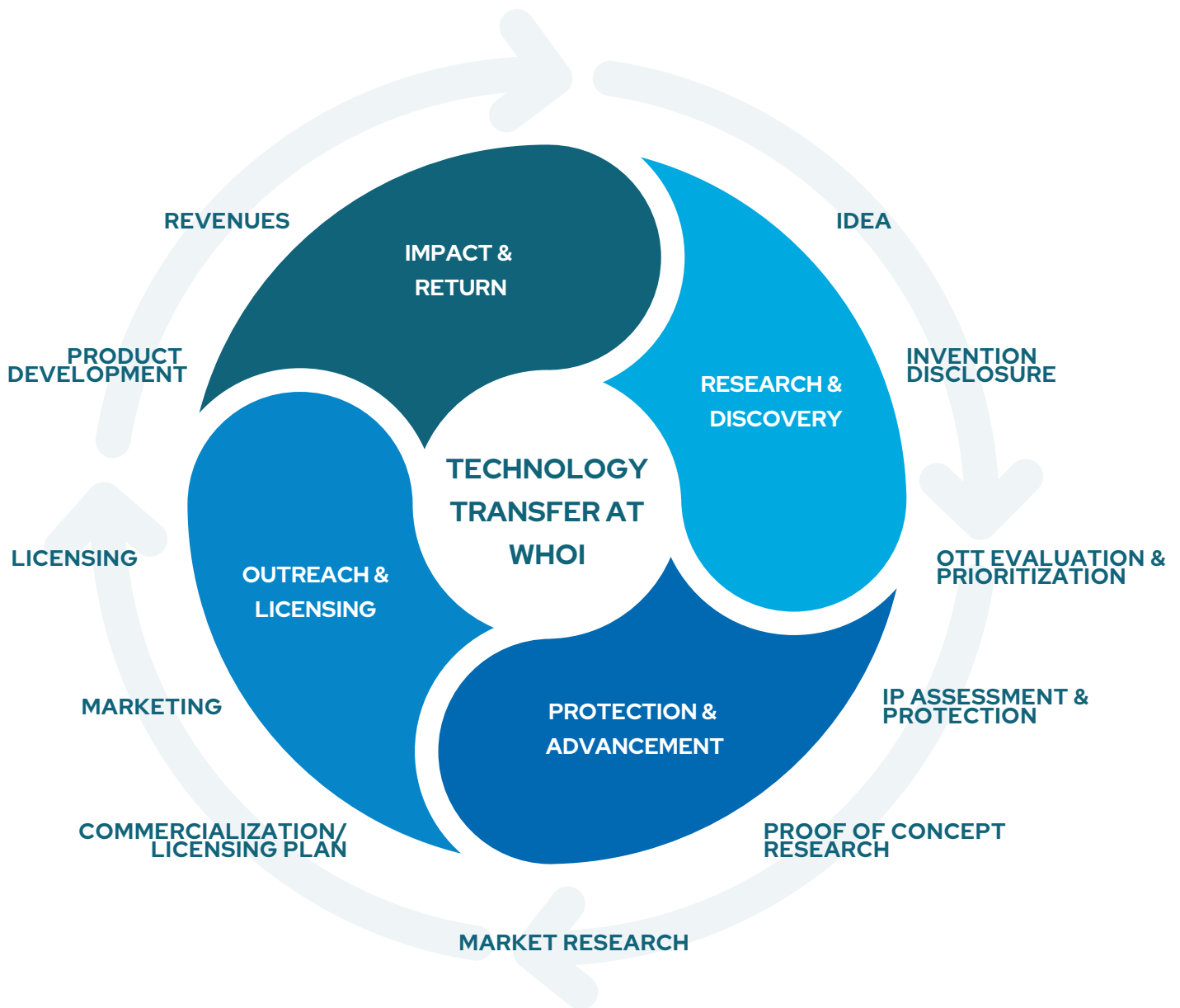
FOR ADDITIONAL INFORMATION & RESOURCES PLEASE VISIT:

[TECHTRANSFER.WHOI.EDU](https://techtransfer.whoi.edu)



THE TECHNOLOGY TRANSFER PROCESS

AT WOODS HOLE OCEANOGRAPHIC INSTITUTION



INVENTION DISCLOSURES

WHAT IS AN INVENTION DISCLOSURE?

An Invention Disclosure is a written description of your invention that is submitted to OTT. Before submitting a form, reach out to OTT via email, phone, or web to discuss your idea or innovation with us. We will determine if you need to submit a disclosure form. The Invention Disclosure Form, submitted through our online portal, should list all support and funding, collaborators or suspected inventors, and include as much information as possible for OTT to begin pursuing protection, marketing, and commercialization activities.

As it may affect protectability, it is very important to include the date of any upcoming publication or public disclosure. These dates may establish deadlines for filing patent applications, should OTT decide to file an application.

This document will be treated as confidential.

After OTT has received your submitted Invention Disclosure Form, OTT will begin to investigate protectability, commercial applications, and market opportunities, in collaboration with the inventor. OTT may create marketing materials or web descriptions to help pursue commercialization and licensing for the technology.

Once a potential licensee has been identified, and confidentiality agreements have been put in place, more detailed exchanges of information can be made, and OTT may ask the inventor to join for company licensing discussions.





INVENTION DISCLOSURES

WHEN SHOULD I SUBMIT AN INVENTION DISCLOSURE & HOW DO I KNOW WHAT IS CONSIDERED AN INVENTION?

You should complete an Invention Disclosure with OTT whenever you feel you have discovered something unique or with possible value and you are encouraged to come talk to OTT if you feel your work is solving a significant problem. If you are unsure- please reach out to OTT.

You should disclose your idea to OTT before presenting your innovation publicly (published papers, conference presentations, press, videos, etc.) to ensure we are able to apply for certain protections, if necessary. Please reach out to OTT well in advance. It is important to remember that IP could still exist and have value even if it is not patentable.

HOW DO I SUBMIT A DISCLOSURE AND WHAT ARE THE BENEFITS TO ME AS AN INVENTOR?

You can start the disclosure process by emailing or calling OTT- or if you've been through the process before, submitting the full disclosure form on OTT's website. OTT will follow up for a meeting or call. The status of submitted disclosures can be checked by inventors through the Inventor's Portal.

Under the [WHOI IP Policy](#), disclosure is required. If government funds were used for your research, you are also required to file a prompt disclosure, which will be reported by OTT to the sponsoring agency. Similar requirements may exist for other sponsored projects.

Submitting a disclosure allows the innovation to be considered for commercialization which could lead to broader impact for your work. There are also benefits to inventors should the technology be licensed. See the licensing section of this guide for more information.

WHAT HAPPENS AFTER I DISCLOSE AN INVENTION?

After disclosing an innovation- OTT will work closely with the inventor to assess commercial potential, determine appropriate protections and, if applicable, start forming a plan to bring the innovation to market through successful licensing. Throughout this process, OTT will update you on next steps, share protection and licensing decisions, and discuss licensing pathways with you as an inventor.



Inventor discloses innovation to OTT. OTT meets with inventor to better understand technical details, value of the innovation, and potential uses.

In order for OTT to be able to effectively investigate opportunities or file for protections- it's important to share as much as possible during this initial meeting and in your disclosure form.



OTT performs market research and patentability analysis, looking at potential applications, market opportunity, and protectability.

We're happy to share our findings with inventors during this assessment. Please reach out to OTT with relevant market information or to better understand WHOI OTT's findings.



Based on market analysis, OTT forms initial protection and commercialization strategy and prioritizes amongst other WHOI technologies.



OTT pursues IP protection if there is a business case for IP protections.

Not all technologies are appropriate for patenting - some are better categorized as trade secret or know-how. Additionally, WHOI must be able to justify patent costs by making a business case for each filing.



OTT begins the marketing & licensing process.

See the Licensing & Commercialization section at the end of this guide to learn more about how OTT markets technologies and the different licensing pathways.

INTELLECTUAL PROPERTY (IP)

WHAT IS IP?

WIPO Definition:

Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.

IP is protected in law by, for example, patents, copyright and trademarks, which enable people to earn recognition or financial benefit from what they invent or create. By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to foster an environment in which creativity and innovation can flourish.

WHAT IS WHOI'S POLICY ON OWNERSHIP OF IP?

As a general rule, WHOI owns innovations made by its employees while acting within the scope of their employment or using the Institution's resources.

Ownership depends upon the employment status of the creators of the



invention, funding, and use of WHOI facilities or resources.

More information can be found in the [WHOI IP Policy](#).

WHAT IF I AM WORKING WITH COLLABORATORS OUTSIDE OF WHOI?

All contributors should be listed in an invention disclosure. OTT will work to determine ownership based on subsequent meetings with the team that is disclosing.

It is important that you discuss with OTT all collaborations before they begin (particularly with industry), to understand the implications for any subsequent inventions and make sure IP terms in associated contracts are properly reviewed.



INTELLECTUAL PROPERTY (IP)

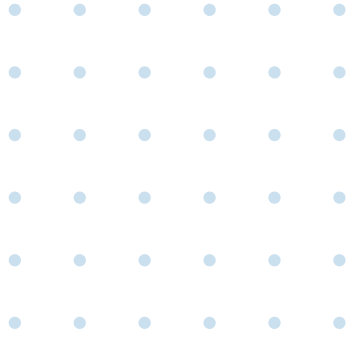
WHAT IS A PATENT?

A patent grants the holder the right to exclude others from making, selling, offering to sell, and importing, any patented invention. A patent does not necessarily provide the holder any affirmative right to practice a technology since it may fall under a broader patent owned by others. Instead, it provides the right to exclude others from practicing the invention.

Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed in the United States or, in special cases, from the date an earlier related application was filed, subject to the payment of maintenance fees. U.S. patent grants are effective only within the United States, U.S. territories, and U.S. possessions. Under certain circumstances, patent term extensions or adjustments may be available.

WHAT 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 making articles, and even methods of performing business.

HOW IS INVENTORSHIP DETERMINED?

Under U.S. law, an inventor is a person who takes part in the conception of the ideas in the patent claims of a patent application. Thus, inventorship of a patent application may change as the patent claims are changed during prosecution of the application.

An employer or person who only furnishes money to build or practice an invention is not an inventor. Someone simply following the directions of another is also not an inventor. Inventorship is a legal issue and may require an intricate legal determination by the patent attorney or patent agent responsible for the application.



INTELLECTUAL PROPERTY (IP)

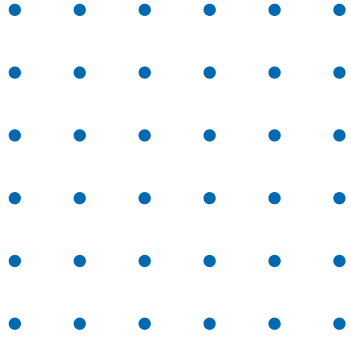
WHO IS RESPONSIBLE FOR PATENTING?

WHOI's Office for Technology Transfer is responsible for determining what technologies should result in patent filings. On occasion, OTT will work with outside patent counsel to assure access to patent specialists in a wide variety of fields and technology areas. Inventors work with both OTT and patent counsel (if applicable) in drafting and reviewing the applications.

OTT has a limited budget for patents each year. In order to pursue patent protection, OTT must determine that the innovation is patentable and there is a reasonable business case for patenting.

WHAT IS THE COST TO FILE A PATENT?

Filing for a US patent may cost between \$10,000 and \$20,000. These costs can easily double to obtain an issued patent. Once a patent issues there are periodic maintenance fees due to keep the patent alive. Filing in foreign countries is an added expense and typically only done in the case a licensee has been identified.



WHAT IS THE DIFFERENCE BETWEEN A PROVISIONAL APPLICATION AND A REGULAR OR NON- PROVISIONAL APPLICATION?

A provisional application is used to preserve rights and save costs while providing extra time to prepare a regular or non-provisional application. A provisional application is not reviewed during the year in which it is pending and claims are not required to be submitted.

A non-provisional application must be filed before the one-year mark to receive the benefit from the early filing date. The innovation still needs to be adequately described in the provisional application. Often OTT will reach out as we approach one year from filing the provisional application to see if the technology is still being actively developed. Although fees are lower to file a provisional application- OTT still needs to justify filing for use of resources.



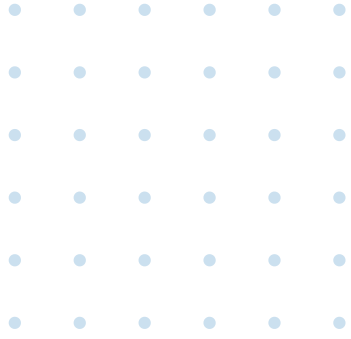
INTELLECTUAL PROPERTY (IP)

WHAT IF I CREATED THE INVENTION WITH SOMEONE FROM ANOTHER COMPANY OR ACADEMIC INSTITUTION?

If you created the invention under a sponsored research agreement or other collaborative agreement with a company, you should disclose this to OTT as OTT will need to review that agreement to determine ownership and other rights associated with the contract.

If the technology is jointly owned with another academic institution, OTT will usually enter into an "inter-institutional agreement" or a "joint invention agreement" that provides for one of the institutions to take the lead in protecting and licensing the invention, sharing of expenses associated with the patenting process and allocating any licensing revenues.

If the technology is jointly owned with another company, OTT will work with the company to determine the appropriate patenting and licensing strategy.



WHAT IF I WOULD LIKE OTT TO FILE A PATENT BUT OTT DECLINES TO FILE?

The final decision to file a patent is with OTT. Although inventors can express their desire to see their innovation patented, OTT will need to justify the expense and use of resources through reasonable expectation that costs will be recouped through licensing.

OTT aims to be transparent in all assessment of invention disclosures. Inventors are encouraged to reach out to OTT to request market research and any written assessment documents for review. Inventors are also encouraged to share with OTT opportunities for commercialization that they have identified in the course of their work.

Often OTT determine that something is commercializable but patenting cannot be justified. Innovations can still be licensed in many cases without associated patents.

U.S. PATENT PROSECUTION TIMELINE

Filing a patent is not a quick process. Patents can take about two years to issue from the first filing date. OTT works to keep inventors updated on the status of the application throughout prosecution. It's important as you continue to develop the technology or work on improvements, you continue to disclose these to OTT - even after a first patent application has been filed.

0 Months - Idea Disclosure



Any idea that solves a problem may be patentable, and neither data nor experiments are required. Tell OTT about your idea by calling, emailing, or filling out our webform.

0-12 Months - Provisional Filing



If OTT initially decides to pursue IP protection, we will draft a provisional application for your review based on the information you provided in your disclosure. We recommend maintaining confidentiality at this stage; however after patent filing, publications may be submitted and discussions with companies are appropriate as long you have worked with OTT to put the proper confidentiality agreements in place.

12-18 Months - Non-Provisional Filing



The application is updated and finalized for final inventor review and submission. OTT will need additional information from the inventor on progress in the last 12 months. You may also be required to speak with outside counsel if WHOI OTT chooses to use outside counsel for prosecution.

18 Months- Application Publishes



The application is now publicly available. The general public and companies can now view the patent application online.

18-36 Months - Application Examination



The Patent Office rejects nearly every invention. OTT will negotiate with and convince the Patent Office of the invention's patentability. During the patent prosecution, additional assistance may be needed from the inventor to facilitate the examination process.

Application Allowance and Issuance



Additional patent applications may be filed to expand the commercial value of your patent. Be sure to keep OTT up to date on all new developments and improvements.

20+ Years



Once issued, the patent is enforceable for 20 years from the first filing date. WHOI OTT will continue to pay maintenance fees to keep the patent alive until a licensee is found. OTT may choose to abandon patents where there is little chance of licensing to recoup continued patent costs.

COMMERCIALIZATION & LICENSING

WHAT IS A LICENSE AGREEMENT?

License agreements describe the rights and responsibilities related to use and exploitation of intellectual property. WHOI licenses typically require the licensee to diligently pursue commercialization of the licensed technology or IP for the public good. WHOI licenses also typically include standard licensing terms related to reimbursement of patent expenses, payment of ongoing patent expenses, royalties on sales, milestone payments, in some cases equity, among other terms that aim to provide reasonable return to WHOI.

HOW IS A COMPANY CHOSEN TO BE A LICENSEE?

A licensee is chosen based on their ability to commercialize the technology. Sometimes OTT licenses to an established company, sometimes a spin-off company licenses the technology. During license consideration and negotiations, OTT requires that an

interested licensee provide information on their business plan or commercialization strategy. OTT uses this to assess the potential licensee and develop license terms.

WHAT ARE THE BENEFITS TO ME AS AN INVENTOR IF MY INNOVATION IS LICENSED?

The number one benefit of licensing technology is the broader impact of your work and technology. Licensing allows your technology to get into many more hands for the benefit of the public.

Additionally, under the [WHOI IP Policy](#), licensing revenues (typically royalties) are shared in part with the inventor(s).

Sometimes a licensing relationship with a company can also lead to additional sponsored work or opportunities.

LICENSING TECHNOLOGY FOR BROAD IMPACT

There are many potential pathways to licensing WHOI technology & not all companies take the same path. On this page is a simplified process to give you an idea of the basic steps and options in licensing.

LICENSE TO EXTERNAL COMPANY

STEP 04

OTT Works with Inventor to Perform Market Research

STEP 05

OTT Crafts a Commercialization Plan

STEP 06

OTT Provides Ongoing IP Management

STEP 07

OTT Performs Marketing & Outreach

STEP 08

OTT Negotiates Terms

STEP 09

License Agreement

START A WHOI SPINOFF

STEP 04

Expressed Startup Interest to OTT

STEP 05

Company Formation

STEP 06

Company Formulates Business Plan

STEP 07

Capitalization

STEP 7.5 (OPTIONAL)

Option Agreement

STEP 08

OTT Negotiates Terms

STEP 09

License Agreement

LICENSING TO AN EXISTING COMPANY

A more detailed look at the process when an established company expresses interest in licensing a WHOI technology

Sponsored Research or Proof of Concept Research can often precede and lead to technology licensing. Often other funding opportunities are explored by the inventors at this stage to further advance and prove the technology.

OTT uses various marketing & outreach tactics including direct outreach, press releases, industry feature articles, online technology portals, email marketing, etc. It's helpful for the inventor to let OTT know if they have any company contacts that have expressed interest.

STEP 04

OTT Works with Inventor to Perform Market Research

OTT does a deep dive into the market opportunity, industries, & applications in order to determine fit and need for the technology.

STEP 05

OTT Crafts a Commercialization Plan

OTT will determine next steps required to advance technology toward licensing. Is further development required? Specific data or demonstrated capability? Is the inventor actively working on this? OTT will also begin to establish an outreach strategy based market research findings

STEP 06

OTT Provides Ongoing IP Management

OTT manages ongoing prosecution of any existing IP as well additional filings on any improvements, new developments, or complementary technologies.

STEP 07

OTT Performs Marketing & Outreach

OTT will reach out to potential licensees to set up calls, presentations, and/or demonstrations. This process typically takes some time to find the right partner. Licensability is often dependent on technology development stage.

STEP 08

OTT Negotiates Terms

STEP 09

License Agreement



STARTING A WHOI SPINOFF

STEP 04

Expressed Startup Interest to OTT

Inventors and/or management team will express interest to OTT in forming a company and licensing technology.



STEP 05

Company Formation

Inventors will form company, start to establish management team, & start outlining their Conflict Management Plan (CMP) for WHOI's Conflict Committee (if needed)



STEP 06

Company Formulates Business Plan

Company will provide OTT with a business plan including goals of the business, methods to attain those goals, and time-frame for achievement



STEP 07

Capitalization

Company begins seeking investment and further establishing plan to raise funds.



STEP 7.5 (OPTIONAL) Option Agreement



An Option Agreement often gives a company time to get established before committing to a license & all of the obligations that come with it. Option Agreements are available at WHOI's discretion & always available with the [Express Startup License](#)

STEP 08

Negotiate Terms



If opting for the [WHOI Express Startup License](#), terms are pre-negotiated

STEP 09

License Agreement

COMMERCIALIZATION & LICENSING

WHAT OTHER TYPES OF AGREEMENTS MIGHT BE PART OF THE TECHNOLOGY TRANSFER PROCESS?

- **Non-Disclosure Agreement (NDA)**—sometimes also called a CDA or PIA): NDAs are often used to protect confidentiality of an innovation while it's being evaluated by a potential licensee. OTT will initiate an NDA before inventors are involved in company discussions. OTT also recommends reaching out whenever speaking with outside companies to see if an NDA is needed.
- **Inter-Institutional Agreement (IIA)**: IIAs are used when IP is jointly owned between two institutions. IIAs outline how IP and licensing will be managed along with associated expenses or revenues. OTT will identify when an IIA is needed based on the invention disclosure.
- **Option Agreement**: An option agreement preserves the opportunity for an outside party to negotiate a license for WHOI intellectual

property. Sometimes an option is its own agreement - other times an option is incorporated into another research agreement or joint development agreement. Option agreements allow for further advancement or assessment while preserving the opportunity to license before a licensee is ready for a full license. Options are typically for a set period of time with an associated fee.

- **Joint Development Agreement (JDA)**: JDAs describe the terms under which two parties - typically a company and WHOI PI jointly develop or advance a technology. A JDA is sometimes used to further advance a technology towards licensability while offering the company an Option.
- **Sponsored Research Agreements (SRA)**: SRAs describe the terms under which a sponsor provides research support to WHOI and are managed by Grants and Contracts.



COMMERCIALIZATION & LICENSING

HOW ARE LICENSING REVENUES DISTRIBUTED?

Licensing revenue distribution can be found in the [WHOI IP Policy](#). Royalties coming back to WHOI from licensed technology are disbursed by WHOI OTT and Finance. Typically they are split between the inventor(s), WHOI, the inventor's department, and the Translational Research Fund (TRFP) which provides applied research funding to the WHOI community each year to advance innovations towards commercialization.

WHAT IS THE INVENTOR'S ROLE DURING COMMERCIALIZATION?

The inventor's role during commercialization depends on their level of interest, any associated agreements, and the licensee's interest in utilizing the inventor's expertise/services. OTT aims to bring inventors into the process only where necessary or where they have interest in participating. OTT requires participation from the inventor in licensing

conversations, determining what is available to be transferred, and transferring technical materials upon license execution, at a minimum.

HOW ARE INVENTOR ROYALTY SHARES SPLIT WHEN THERE ARE MULTIPLE INVENTORS?

The inventor's share of royalties is typically split evenly amongst all inventors unless another arrangement is agreed to in writing by the inventors.

CAN THERE BE MULTIPLE LICENSEES?

Yes, WHOI can license non-exclusively to multiple companies or exclusively to multiple companies in different fields of use.

COMMERCIALIZATION & LICENSING

WHAT WILL HAPPEN TO MY INNOVATION IF THE STARTUP COMPANY OR LICENSEE IS UNSUCCESSFUL?

Licenses typically include a number of terms that require a licensee to demonstrate that they are effectively commercializing the technology. These may include diligence requirements and milestones that if not met, would result in the termination of the license. If the license is terminated, OTT can then seek another licensee. Although the failure of a company cannot be predicted, it is always the goal to properly vet/evaluate a licensee before entering into an agreement.

IF I WANT TO START A COMPANY, HOW DO I NAVIGATE CONFLICT OF INTEREST (COI) AND CONFLICT OF COMMITMENT (COC)?

If you are planning to start a company,

license technology, and stay at WHOI for any period of time—you will need to work out a Conflict Management Plan (CMP) which will include things like disclosing your potential conflict to colleagues, separating company work and WHOI work, and may also require a plan to eventually transition to one role or the other. It is the responsibility of the researcher to disclose all outside arrangements and appointments under WHOI's Conflict Policy. All COI/COC matters are handled by the Office of the General Counsel.

WHAT IS AN EXPRESS STARTUP LICENSE?

WHOI's Express Startup License is a pre-negotiated license agreement with set terms meant to expedite WHOI startup licensing. The agreement allows inventors to opt for a license agreement without needing to bring in a third party to negotiate. The terms are meant to be startup-friendly. For eligibility requirements, please see the [Express Startup License Guide](#).



COMMERCIALIZATION & LICENSING

HOW WILL OTT MARKET MY INNOVATION?

OTT markets technologies in a number of ways. We use market research to inform industries and applications to target. Often we have an established relationship with a company in a given field and will bring them new technology opportunities as they arise. Similarly inventors often have established relationships with companies. If there are not established relationships, OTT will identify companies that may be interested and perform outreach- often developing marketing materials (presentations, non-confidential descriptions, one-page summaries) as part of that process. OTT also uses online tech databases, industry publications, press & strategic comms to market tech.

HOW CAN I HELP WITH MARKETING?

It is not only valuable but necessary to have inventors involved in company conversations. It's also useful to help with any company contacts/relationships you may already have. Please share these with OTT. Sharing any materials you have on

the technology such as posters, publications, and presentations, if you have not already done so during disclosure is also helpful in marketing.

HOW LONG WILL IT TAKE TO FIND A LICENSEE?

This depends can depend on a number of factors including the innovations attractiveness, development stage, and market. Most innovations from WHOI are early stage which can make finding a licensee willing to make the investment difficult. Because of this it can take months or more often years to find a licensee. OTT encourages inventors to continue seeking funding to advance the technology during that time as prototypes, data, and any demonstration of the innovations unique value make licensing easier.

HOW CAN I HELP OTT PURSUE COMMERCIALIZATION FOR MY INNOVATION?

Although OTT takes the lead on assessing technologies for commercialization, IP protections, & company interactions, it is impossible for OTT to commercialize technology without the support and involvement of the WHOI inventor. *Below are some ways you can help support the successful transfer of your WHOI innovation.*



Disclose to OTT early and often



Provide timely responses to OTT requests for materials & review.



Keep us updated on your progress, new funding sources, and new technology developments



Tell us about any company interactions or connections that may be relevant to licensing or IP protection.



Be willing and available to participate in company calls, meetings, and conversations.



Come speak with us before conversations with outside companies so we can ensure the correct confidentiality agreements are in place.

Your support as an inventor is critical for success.



**PLEASE CONTACT WHOI
OTT WITH ANY QUESTIONS:**

EMAIL

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