COLUMBIA TECHNOLOGY VENTURES

A BRIEF ON TECHNOLOGY TRANSFER & COMMERCIALIZATION

Columbia | Technology Ventures

TABLE OF CONTENTS

Our mission at Columbia Technology Ventures (CTV) is to bring the benefits of academic innovation from the lab to the market, to save and improve human lives. We tend to be involved in particular when a business entity (usually a corporation or startup) is best poised to translate the science to practice. All of this starts with you, Columbia's inventors, whose research is pushing the boundaries of innovation and creating a better future for humanity.

Each year, CTV manages more than 400 invention disclosures, 100 license deals, and 20 -30 new IP-backed startups, involving over 750 inventors across Columbia's campuses. Our commercialization efforts on your behalf can go in a variety of directions, and this Inventors' Guide attempts to succinctly introduce you to the common topics, paths, policies, and processes you may encounter. The guide offers an interactive overview of the technology transfer process and the services offered at CTV. Be sure to click on the light bulb graphics throughout the document for additional information and examples.

Thank you for your interest in this work — it is our privilege to be your partner.

TECHNOLOGY TRANSFER INTELLECTUAL PROPERTY **INVENTION REPORTS MARKETING AN INVENTION & SELECTIO STARTUPS CONFLICTS OF INTEREST** LICENSE AGREEMENTS COMMERCIALIZATION **REVENUE DISTRIBUTION CONNECT WITH US**



Orin Herskowitz Sr. VP for Applied Innovation and Industry Partnerships Executive Director, Columbia Technology Ventures

This guide borrows from Johns Hopkins Technology Ventures and Stanford University's Office of Technology Licensing's Inventors' Guide. I want to thank Executive Directors Christy Wyskiel (Johns Hopkins) and Karin H. Immergluck (Stanford) and their teams for their permission to use their materials.

	1
	4
	7
NG A LICENSEE	9
	11
	13
	14
	15
	18
	20

TECHNOLOGY TRANSFER

What is technology transfer?

Technology transfer is the movement of knowledge and discoveries from the research setting to the public for the benefit of society. Transfer occurs in many ways, but for the purposes of this guide, tech transfer refers to the formal licensing of Columbia University intellectual property to third parties, whether established industry players or new startup companies. At Columbia and at many of our peer institutions, tech transfer increasingly means providing support for innovation, entrepreneurship, and commercialization well beyond the licensing of intellectual property (more on that below).

What is intellectual property?

Intellectual property (IP) describes the property that results from the human intellect. In the university context, this typically includes inventions, and the materials, know-how, and technology supporting the development and exploitation of those inventions. Inventions are new, useful, and non-obvious solutions to problems that work for their intended purposes, such as methods, devices, products, compositions of matter, and improvements. Examples of technological support of inventions include life forms (e.g., new animal models), other tangible (i.e. physical) property, and creative works (such as software, compilations of data, and other original works). The Columbia University patent policy is available in the faculty handbook.

How is intellectual property transferred out of Columbia?

The CTV team uses various tools such as patents, copyrights, and other forms of legal protection to protect its intellectual property. Technology is then transferred through a license agreement in which the university grants its IP rights to the defined technology to a third party for a period of years, sometimes for a particular field of use and sometimes limited to certain regions of the world.

What is my role?

Our work begins with your innovations! The purpose of tech transfer is to support the growth of ideas and insights you produce during your work at Columbia. As a key stakeholder, you will be asked to:

- you through it.
- from interested companies, and participating in licensing discussions.
- to the United States Patent and Trademark Office as the prosecution progresses.
- Keep us informed. Share any significant technology developments, upcoming publications and interactions with companies related to your invention.

What happens after I submit my invention report?

Within 45 days, you will see an Initial Commercial Assessment of your technology and begin to discuss the marketing and patenting process with your licensing officer.

INTELLECTUAL

PROPFRTY

TECHNOLOGY

TRANSFFR

INVENTION REPORTS

MARKETING &

CONFLICTS OF INTEREST

 Submit an invention report. Report your technology before disclosing it outside of the university (though you should still publish, of course! More on that below). Don't be shy, and don't sell yourself short; the line for what constitutes an "idea" vs. an "invention" is tricky and something we understand well, so don't be afraid to approach CTV even if you aren't confident that your idea rises to the level of a patentable invention. Let us guide

Help us prepare marketing materials, and identify and engage with potential licensees. While our office will do the heavy lifting, we will seek your input identifying licensees, constructing nonconfidential marketing materials, responding to technical guestions

Respond to requests from your licensing officer and our legal team. If we decide to pursue legal protection for your technology, most commonly via a patent filing, you will play a critical role in reviewing the patent application for completeness and accuracy prior to filing the application. While Columbia has a team of in-house lawyers and patent paralegals who manage this process, the team will also need your input when responding

TECHNOLOGY TRANSFER

What is CTV's role in technology transfer?

CTV is the office responsible for overseeing technology transfer on behalf of the university. We are here to:

- Evaluate reported technologies and innovations.
- Support and advise faculty in determining the optimal commercialization path.
- Protect inventions with patent, copyright, or other legal filings.
- Market the inventions to identify a third-party licensee.
- Help startups identify a venture-backable team and raise venture funding.
- Negotiate license agreements to existing corporations or to startups, and ensure licenses comply with all the terms of grants and contracts related to the invention.
- Support faculty startups so that research is brought to market.
- Collect and distribute revenues.

How long does the tech transfer process take?

Unfortunately, the reality is that many inventions may take months or years to be commercialized, and many may never be commercialized at all. While Columbia has had thousands of licenses based on our research innovations, generating billions of dollars of revenue and many successful products and services on the market, the path to these outcomes is unpredictable and not at all guaranteed. Many university inventions are very early stage technologies, or may be ahead of industry's ability to commercialize them. Factors include the development stage of the technology, the market for the technology, the interest of potential licensing partners, competing technologies, the amount of work needed to bring a new concept to the marketplace and the resources of the licensee. However, don't let this discourage you from submitting your inventions and allowing us to support trying to get them to market!

How can I publish the results of my research and still protect the commercial value of my intellectual property?

We at CTV strongly support publishing research results, which is one of the cornerstones of any university's mission. However, if disclosed outside of the university (for example, published, presented, or even simply communicated to others) prior to filing a patent application, an invention may have restricted or minimal potential for patent protection thereafter. Therefore, we strongly encourage you to report your invention as soon as possible before any disclosure of the invention outside of the university. You should also inform CTV of any imminent or prior presentation, lecture, poster, abstract, website description, research proposal submission, dissertation/master's thesis, publication or any other public discussion of the invention. When in doubt, reach out!

INTELLECTUAL PROPERTY

Who owns what I create?

Columbia's patent and copyright policies define the University's intellectual property ownership, including inventions, technology supporting their exploitation and development, creative works, and other products of the human intellect. Generally speaking, as with almost all academic research institutions, all inventions conceived or first reduced to practice in whole or in part by university faculty, students, and staff in the course of their university responsibilities or with more than incidental use of university resources are owned by the university (regardless of the source of funding). For specific questions about intellectual property ownership, CTV will consult Columbia's Office of the General Counsel.

Can a student contribute to an invention?

Yes! Graduate students are often inventors on university intellectual property, and undergraduates sometimes also are inventors when working with a university research lab. In situations where the student's role was part of a university research program, the student will be treated as an inventor alongside Columbia's faculty. On the other hand, for IP created solely by undergraduate students during a Columbia academic course, CTV will generally release any university claim upon request. Click here for more information about students and IP rights.

How does CTV protect my invention?

CTV protects your invention through various intellectual property strategies, which can include combinations of patents, copyrights and other forms of legal protection. For example, if your invention is a new product or process like a therapeutic compound, computational method, medical device or chemical process, then CTV can obtain a patent that can be used to prevent others from making and using your invention. If your invention is an original work of expression like treatment guidelines or software, then CTV can maintain a copyright that can be used to prevent others from copying, distributing or creating derivatives of your work. Even if your invention concerns open-source software, CTV can develop licensing strategies that meet your open-source commitments, while protecting commercialization options for your invention if you would like to preserve your ability to launch a startup based on the work in the future.

3

TECHNOLOGY

TRANSFER

INVENTION REPORTS

LICENSEE SELECTION

MARKETING &

STARTUPS

CONFLICTS

OF INTEREST

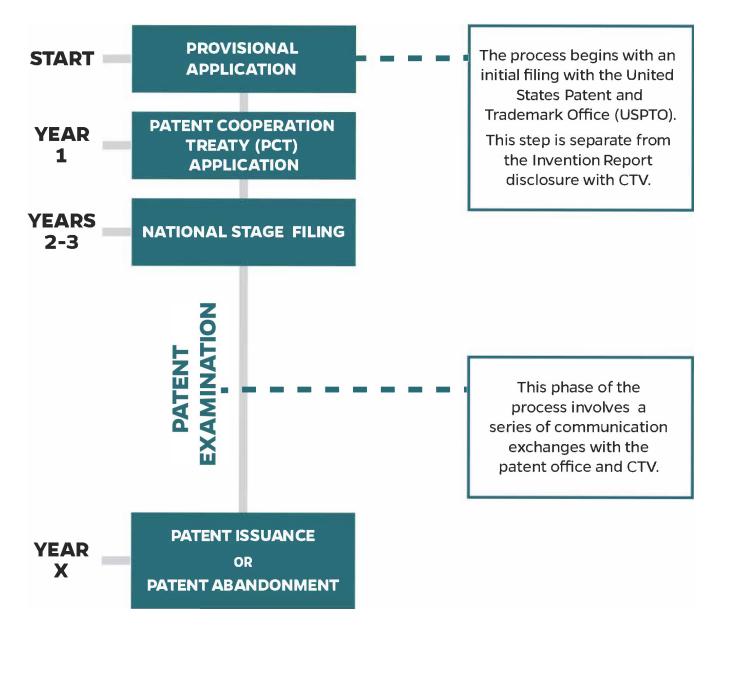


INTELLECTUAL PROPERTY

What is a patent?

In the U.S., a patent gives the holder the right to exclude others from making, using, 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, a patent provides the right to exclude others from practicing the invention. Patent claims are the legal definition of an inventor's protectable invention. Watch the Patents 101 lecture by Columbia's Chief Patent Counsel, Jeff Sears, here.

PATENT PROCESS



What can be patented?

Patentable subject matter includes processes, machines, compositions of matter, articles, computer programs and methods (including methods of making compositions, methods of making articles and even methods of performing business). Non-patentable subject matter includes abstract ideas, laws of nature and natural phenomena. Once a patent is issued, it is enforceable from its issued date for a term that runs for 20 years from the initial filing date of the application that resulted in the patent, assuming that USPTO-mandated maintenance fees are paid.

What is the difference between a provisional patent application and a regular (or "utility" or "non-provisional") patent application?

Provisional patent applications are often used as a cost-effective way to preserve patent rights while gathering additional data, assessing the market opportunity for the invention, and/or preparing a utility patent application.

A regular, non-provisional U.S. application must be filed within one year of the provisional application to receive the benefit of the provisional filing date. Only the material described and enabled in the provisional application can receive the benefit of the provisional filing date, so getting the details right is important for a provisional application.

What does it cost to file for and obtain a patent?

Filing a U.S. patent application typically costs \$10,000-\$20,000, and the cost of patent prosecution to secure an issued patent costs an additional \$15,000 or more. Obtaining issued patents in other countries may cost \$25,000 or more per country. Maintenance fees are also required to keep the patent "alive" in each relevant country. These costs are part of Columbia's investment in these innovations, and come from CTV's operating budget.

Will CTV initiate or continue patenting activity without an identified licensee?

We often file for protection before a licensee has been identified if we believe that a licensee can be identified. At times, CTV must decline further patent prosecution after a reasonable period (often a year or two) of attempting to identify a licensee. Once a license has been signed, the licensee generally assumes the patenting expenses, including reimbursement of past expenses.

INVENTION REPORTS

STARTUPS LICENSEE SELECTION

MARKETING &





INVENTION REPORTS

What is an invention report?

THE 7 QUESTION

This is the first step in the commercialization process. It is a written description of your invention that includes all sources of support and information necessary to evaluate the protectability and commercial potential of your work. It also allows Columbia to confirm what other entities (such as foundations who may have funded your work, or companies with whom you have collaborated) might have rights that need to be evaluated. It is very important to report inventions before you communicate your research outside of the university. You can start the process of reporting your invention here.

Should I report research tools?

Yes. Sometimes referred to as Tangible Research Property (TRP), these are materials such as antibodies, vectors, plasmids, cell lines and mice that are used to conduct research. Research tools can be licensed to commercial third parties or research collaborators, and can generate royalties for the laboratory; patent protection is not necessarily needed to do this. Columbia licenses dozens of research tools every year, which can provide critical funding to support your research lab. We will work with you to develop the appropriate protection, licensing and distribution strategy.

When should I report my invention?

Inventors should do so when they feel they may have discovered something unique with possible commercial value or when the terms of your sponsored research or material transfer agreements require reporting of inventions. Ideally, this should be done as soon as possible before communicating results outside of the university. It is critical to inform CTV about any past or planned presentation, lecture, poster, abstract, website description, research proposal, dissertation/master's thesis, publication or any other discussion of the invention outside of the university. Embargoing a thesis does not protect the technology from public disclosure.

RECEIVE **Report of Invention** is submitted CTV confirms receipt within two business days

Technology **Licensing Officer** discusses submission with innovator Team evaluates commercialization opportunity and licensing strategies

How does CTV evaluate inventions?

The primary factors in the evaluation are the following: patentability of the invention; marketability of potential products or services; relationship to related intellectual property (Columbia's or others') that may affect freedom to operate; size and growth potential of the relevant market; amount of time and money required for further development; preexisting rights (also known as "background rights") associated with the intellectual property; and potential competition from other products/technologies. We consult with the inventors, patent attorneys and industry contacts as part of this process.

What strategies does CTV use to commercialize software?

Software can be translated or commercialized through several mechanisms. Some inventors choose to distribute their software through the traditional licensing process, involving patent or copyright protection. Other researchers distribute code under an OPEN-SOURCE open-source license based on grant, publication or other requirements. Still others SOFTWARE simply want to provide click-licensing, either for free or for a fee, or with different strategies for use by companies vs. not-for-profits. CTV can assist with all aspects of software licensing, with the ultimate choice being up to the inventors.

TECHNOLOGY

TRANSFER

INTELLECTUAL

PROPERTY

INVENTION RFPORTS

MARKETING & LICENSEE SELECTION

STARTUPS



LICENSE AGREEMENTS

TECHNOLOGY INTAKE PROCESS

EVALUATE

DETERMINATION

CTV provides a recommendation

- Pursue IP protection and licensing
- Further technology development
- License without patent
- Do not pursue further
- Continue evaluation

REVENUE

DISTRIBUTION

CONNECT

WITH US

MARKETING AN INVENTION & SELECTING A LICENSEE

How does CTV identify licensees and market my inventions?

The inventor's subject-matter expertise and research and consulting relationships can be instrumental in identifying both potential licensees and technology champions within those organizations. Studies have shown that over 70% of all licenses are executed with commercial entities known by the inventor, so the contacts you provide in your invention report and in subsequent meetings with CTV staff can be extremely useful. CTV leverages its existing licensee relationships and conducts market research to identify prospective licensees. To help fund startups based on your technology, CTV works with over 1,000 venture capital investors across the country and around the world. Technologies available for license are summarized on our <u>website</u>, a public inventory of Columbia inventions. Inventor publications and presentations are also excellent marketing tools.

How long does it take to find a potential licensee?

Based on Columbia's experience with over 10,000 inventions over the past 40 years, for inventions that ended up being licensed, the mean elapsed time from receiving an invention report to that license is approximately 2.5 years. However, the standard deviation is quite wide. Some inventions are licensed within months of disclosure, and others may be licensed 10 - 15 years from the patent filing, depending on the stage of development of the technology and the product/market fit with industry's needs.

What happens once a potential licensee is identified?

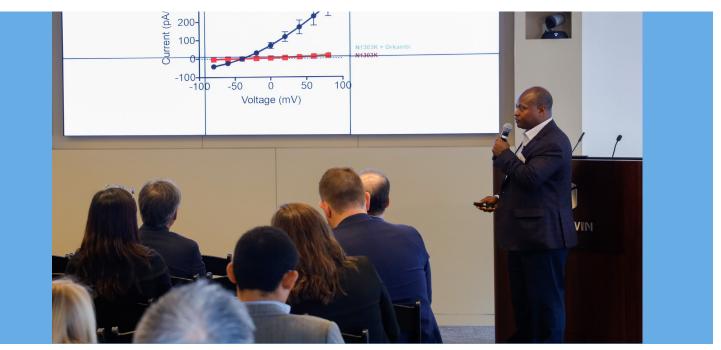
Once interested companies are identified, we typically begin the licensing process as follows:

- A nondisclosure agreement is signed to protect all parties, if confidential information will be disclosed.
- A kickoff meeting is held to discuss the potential licensee's business strategy and the CTV licensing process.
- The potential licensee performs technical due diligence. Inventors meet with company scientific staff to discuss the details of their technology.
- CTV presents a "term sheet," the business terms in summary format. Several rounds of negotiation are typically needed to reach agreement.
- CTV presents a draft of the full license, including the negotiated business terms and the legal terms. Several more rounds of negotiation are typically needed.
- The final version of the license is circulated for signature, usually electronically.

While this process can often be expedited if needed, it is by nature an iterative series of discussions, and hence can take many months to conclude as both parties work through the required issues.

What if I want to start a company to commercialize the technology?

Speak with your Technology Licensing Officer, who can discuss the key aspects of startup formation and connect you to relevant resources. See the STARTUPS section.



Dr. Henry Colecraft presents his technology to venture capitalists (VCs) at CTV's Pitch Day in 2019. The technology would later be licensed to two startups.

DID YOU KNOW?

Many licenses are executed with commercial entities known by the inventor. Therefore, the contacts you provide in your Invention Report and subsequent meetings with CTV staff can be extremely useful!

INTELLECTUAL

PROPFRTY

TECHNOLOGY

TRANSFFR

INVENTION Reports LICENSE

AGREEMENTS







STARTUPS

What is a university startup, and how does it get formed?

A university startup is a new business entity often formed by Columbia researchers or their colleagues to commercialize one or more related intellectual properties. Increasingly, startups are the way many of Columbia's most exciting and transformative innovations are brought to market. CTV assists in launching 15 - 30 new startups based on Columbia's innovations every year, up from approximately 5 per year in 2008! See the sidebar for some of Columbia's startups.

Does CTV give any special consideration to inventor startups when selecting a licensee?

CTV must ensure that the licensee chosen is the one with the best chance to bring the technology forward. That said, the inventors are often uniquely positioned to develop and champion a technology, so a startup company is often the best path for commercialization. If the inventors are supportive of the startup path, CTV is inclined to license the inventions to the startup based on our standardized approach (more info on the opposite page), and also offers many resources to help your startup survive and thrive (more info below). Your licensing officer can share the details of our startup licensing approach and the resources available.

CTV Startups Have Raised \$3B Over Past 5 Years, at Valuation of Over \$9B

What role does an inventor usually play in a company?

Inventors can play various roles in a startup company, such as founder, scientific advisory board member, or consultant. Because such participation raises potential conflicts of interest and conflicts of commitment, we encourage you to discuss your intentions first with your CTV licensing officer, and then with the Columbia Faculty Conflict-of-Interest Committee, as early as possible. To help determine the level to which you want to be involved with a startup, consider watching this video.

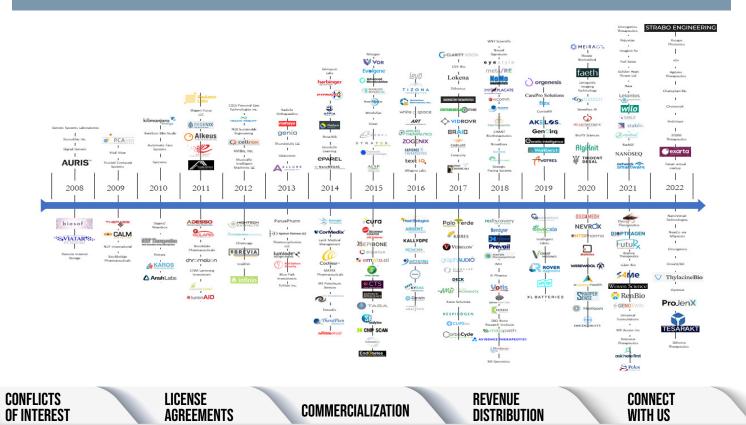
Do all Columbia startups receive the same terms?

About 10 years ago, Columbia switched to using a standardized approach to startup licensing, with many startup-friendly terms such as very low upfront fees, fixed equity percentages, low or no early-year milestones, and deferred reimbursement of past patent expenses. The goal is to treat all faculty startups equally wherever possible in order to streamline the licensing process. The approach has been very well received by both entrepreneurs and the venture community, and has contributed to an increase from ~5 IP-backed startups per year in 2008 to ~25 startups per year in recent years. Well over 150 Columbia startups have been launched and received professional funding using these terms.

Accelerating Trajectory of Launching Deep Tech Startups Based on Innovations Emerging From Columbia's Research Labs



REPORTS



TRANSFFR

PROPFRTY

CONFLICTS OF INTEREST

What is a "conflict of interest," and why are they relevant when faculty engage in commercialization?

Because of the financial interest created for Columbia inventors, commercialization may introduce the potential for or perception of "conflicts of interest" (COI). Like most universities, Columbia has conflict of interest committees, made up of faculty from across the university, that review each potential conflict and where possible determine an appropriate management plan. CTV has no formal role on these committees, but works closely with them and encourages inventors to speak to the appropriate committee early when a faculty member is contemplating a startup or wants to be involved in human subjects research related to a licensed technology. The earlier you speak with the committee, the more likely that they will be able to help you proceed.

How do I learn more about conflict of interest?

Faculty should read Columbia's Conflict of Interest policy, which includes, among other relevant information, disclosure requirements and the review process. The Research Conflict of Interest website includes additional information regarding the appropriate roles a faculty member can play in a startup and frequently asked questions.

The Policy requires case by case review, and each proposed activity has its own nuances, so early disclosure of intended commercialization activities in the Rascal disclosure form is critical. This can ensure that potential conflicts are appropriately managed from the start and do not interfere with the goal of bringing the innovation to market. The Office of Research Compliance and Training provides individual consultations on conflict of interest issues. Contact Naomi Schrag (ns2333@columbia.edu) or Mike Klein (mak67@columbia.edu) to schedule a consult.

A link to the conflict of interest policy and a detailed explanation of disclosure requirements can be found here.

LICENSE AGREEMENTS

What is a technology license or license agreement?

A license is a written contract by which an owner of IP permits another party to act under all or some of the owner's rights, in addition to laying out various rights and responsibilities related to the use and commercialization of the IP, as well as the business terms that accompany the transfer of rights.

What is an option agreement?

An option agreement permits a prospective licensee to evaluate a technology and its market potential and/or fundraise for a limited time before licensing, during which time the technology is on "hold" from others. Essentially, it is a precursor to a license agreement.

If my invention is licensed, how do I benefit financially?

The licensing of an invention is an indication that a technology has market relevance and may, someday, reach the market and save or improve human lives. Inventors can earn money, per Columbia's patent policy, by sharing in any net revenues received by Columbia as a result of licensing their inventions. Inventors all receive a personal share of that revenue, and active faculty members with research labs also receive a share to support their lab. More information on revenue sharing policies at Columbia can be found below.

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

Many licensees will be more successful in their commercialization efforts if the inventor or the inventor's lab is actively involved. This can range from infrequent, informal contact (especially during and immediately following the licensing discussions) to a more formal consulting or sponsored research arrangement in the years thereafter. Naturally, a startup founder should expect to be substantially more involved, depending on their role with the company and at Columbia. However, CTV may be able to license and commercialize your invention even if you do not wish to or don't have time to be involved. Please speak with your licensing officer for more information. **OTHER AGREEMENT TYPES**

TECHNOLOGY

TRANSFFR

INTELLECTUAL

PROPFRTY

INVENTION REPORTS

STARTUPS

MARKETING &

LICENSEE SELECTION

CONFLICTS

OF INTEREST

LICENSE

REVENUE

DISTRIBUTION

CONNECT

WITH US

COMMERCIALIZATION

What activities occur during commercialization?

Signing a license agreement is usually the beginning of a long-term relationship between inventors/the university and the licensee. Most licensees invest in further refinement or development of a technology to improve functioning, reduce risk, prove reliability, solve manufacturing and pricing challenges, and satisfy the market requirements for adoption by customers. This can involve additional testing, clinical study, and prototyping for manufacturability, durability and integrity, as well as further development to improve performance and other characteristics. Along the way, CTV collects periodic financial and development reports from the licensees to ensure that the technology's potential for impact is being fully pursued. Some of these development milestones may also trigger revenue back to Columbia, which would be shared back with the inventors as mentioned above.

If commercialization is successful or unsuccessful, what revenues are generated for the university?

License agreements typically stipulate payments are due at various points in the commercialization process. These licensing fees (including but not limited to upfront, minimum annual royalties, milestones) range from modest amounts to hundreds of thousands or even millions of dollars. If licensed products are eventually developed and sold, earned royalties (a percentage of the company's net sales) generate revenues. If equity is included in a license, it may yield a return for the inventors and Columbia, but only if the equity can be liquidated through a successful public offering or the sale of the company.

If the startup company or licensee is unsuccessful, what will happen to my invention? Can the invention be licensed to another entity?

Licenses typically include performance milestones that, if unmet, can result in termination of the agreement and the return of the licensed IP back to Columbia. If circumstances allow, CTV can pursue subsequent licensing of that IP to another business.

What CTV resources may be useful to me as I commercialize my technology?

 CTV's Executives in Residence (XIR) Program aims to connect Columbia inventors and technologies with seasoned industry executives, venture capitalists, and serial entrepreneurs. By doing so, we hope to leverage the deep domain expertise of these individuals to help accelerate the path of these promising technologies towards market success. XIRs are encouraged to develop close ties with our inventors, entrepreneurs, and

INVENTION

REPORTS

COMMERCIALIZATION

technology transfer team in order to help Columbia further develop these technologies. The <u>CTV Fellows Program</u> is a globally-recognized fellowship that gives Columbia graduate students and post-docs hands-on experience working on early stage technology assessments; writing marketing abstracts; providing direct assistance to the companies ahead of VC Pitch Days, including pitch deck preparation; and preparing marketing campaigns. Fellows work closely with CTV on a part-time, remote basis. The Columbia Lab-to-Market (L2M) Accelerator Network is a cross-discipline support system providing tactical and strategic guidance to the Columbia-affiliated accelerators in energy, therapeutics, cybersecurity, AI, medical devices, advanced materials, climate tech, smart city, with other technology accelerators expected to be added in the future. Collectively, the Columbia L2M accelerators have received over 1,100 applications, with over 450 teams progressing to educational bootcamps on product development and entrepreneurship. The accelerators have issued over 250 cash awards totaling over \$17.6M, and seen 90+ commercial launches by accelerator teams who went on to raise

- over \$262M in external follow-on funding.
- Lab-to-Market Student Venture Associates (SVA) are undergraduate and graduate students who help advance technologies currently in accelerator programs.
- and technology commercialization for use in grant proposal preparation.
- entrepreneurship-related activity at Columbia.
- the startup.
- connections to relevant VCs on an as-needed basis.

TECHNOLOGY

TRANSFFR

INTELLECTUAL PROPERTY

MARKETING &

STARTUPS LICENSEE SELECTION

CONFLICTS

OF INTEREST

Columbia Grant Clauses Library contains up-to-date clauses relating to entrepreneurship

Columbia Commercialization & Entrepreneurial Resources Database is a universitywide resource geared toward providing a comprehensive and searchable list of all

Identifying startup-friendly service providers: CTV offers a list of attorneys that specialize in startups. These firms have all agreed to charge Columbia startups a discounted and fixed fee to cover completing company formation papers and filing, as well as negotiating the license with Columbia. Most of the firms have also agreed to some kind of deferred payment. These firms have all been recommended by at least one Columbia startup in the past, and all of them have been cleared as completely unconflicted with Columbia, meaning they don't do any business with Columbia and are hence able to fully represent

Marketing to Venture Capitalists (VCs): Twice per year, CTV sends out a list of our most promising emerging startups that are in search of venture financing. This list goes to over 1,000 venture capital and seed investors in our network, all of whom have opted to receive deal flow opportunities from Columbia. Additionally, CTV can facilitate individual

COMMERCIALIZATION (CONTINUED)

- VC Pitch Day: CTV hosts an annual startup pitch day for emerging companies to pitch to an audience of investors. These events are done in collaboration with other universities and have included UCLA, UC Berkeley, Yale, MIT, UPenn, and Harvard.
- Connecting entrepreneurs to startups: In 2016, Columbia (along with Yale) launched the Academic Venture Exchange (AVX), which merged the Entrepreneur in Residence networks from the Ivies plus MIT, Stanford, UChicago, and WashU. If you are in need of a CEO for your startup, AVX maintains a network of seasoned entrepreneurs who may be interested.
- IP for Entrepreneurs class: Columbia periodically offers the six-week course, Intellectual Property for Entrepreneurs and Managers, taught by Orin Herskowitz (Executive Director, Sr. VP for Applied Innovation and Industry Partnerships) and Jeff Sears (Columbia's Chief Patent Counsel). The class provides an overview of the commercial opportunities and risks associated with intellectual property, with a particular focus on technology patents, and features guests from local NYC startups and venture capitalists, sharing their own perspectives. Videos from the 2020 course are available here.
- CTV support for SBIR/STTR applications: CTV periodically offers intensive SBIR/STTR workshops led by SBIR/STTR program experts that are designed to cover program essentials and how to compete for funding. Columbia teams that have a license or option to Columbia intellectual property will have access to the following resources:
 - Follow-on counseling by one of the approved SBIR consultants to support the application writing process
 - Research support by CTV Fellows to facilitate writing the commercialization section of the proposal
 - Review by CTV TLOs of the commercialization section of the SBIR/STTR applications
 - In addition, CTV can provide letters of support for grants or for SBIR applications. Please allow for at least one week prior to the grant deadline to make the request.
- L2M Business Operations Workshops: L2M periodically partners with top industry experts to offer BizOps Intensives to its portfolio teams and faculty that are preparing to enter the marketplace. Through a series of hands-on workshops and office hours, these two-day events provide valuable guidance on the fundamentals of standing up and expanding a successful early-stage venture.

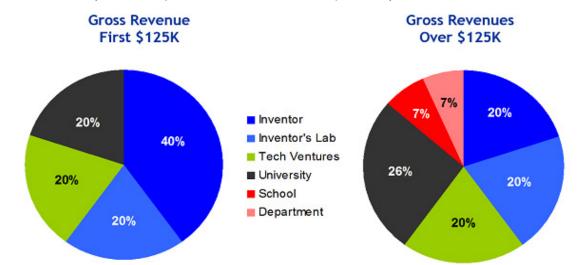
INVENTION

REPORTS

REVENUE DISTRIBUTION

How is licensing revenue – such as royalties – distributed?

Inventors/researchers and their labs, schools, departments, and the University all share in any income earned. Revenue received through up-front payments, option fees, equity holdings, milestones, annual license fees, and royalties is distributed in accordance with the patent policy in the University's Faculty Handbook, which is partially summarized below.



How are payments distributed if there are multiple inventors or multiple inventions in a license?

Before CTV executes a license for one or more IP assets, inventors are asked to suggest the percentage contribution made by each inventor to the technology. A memorandum of agreement (MOA) is signed by all inventors listing the agreed-upon percentages, and the PI and Lab shares are split accordingly. If the license has multiple inventions, license revenue is allocated among the inventions.

How is startup equity distributed?

The university typically receives equity in a startup company as part of the technology licensing agreement, and it holds this equity position until an exit event, such as acquisition or public offering, at which point the equity is sold. The proceeds are then distributed in the same manner as licensing revenue, subject to distribution according to the patent policy.

TECHNOLOGY

TRANSFER

INTELLECTUAL PROPERTY

MARKETING & LICENSEE SELECTION

STARTUPS



LICENSE AGREEMENTS

REVENUE

DISTRIBUTION

REVENUE DISTRIBUTION

What are the tax implications of any licensing revenue I receive from the university?

Inventor shares are paid by check or wire transfer from Columbia Accounts Payable directly to the inventors, typically within six months or so of receipt of the revenues. Recipients are responsible for taxes on this income. The university will send each recipient a Form 1099-MISC annually. Please consult a tax adviser for specific advice.

Can I disclaim my share?

You may redirect your personal share to a Columbia department account. This is irrevocable and affects all future license revenue for the related licenses. If you are interested in electing this option, our office can provide you a letter of instruction. You may also agree to a 0% share in the Memorandum of Agreement (MOA) with the other inventors.

How is CTV's share used?

CTV's share helps cover the cost of services related to technology licensing and the management of Columbia's intellectual property, including: agreement negotiations and monitoring, post-contract compliance, filing and communication with the United States Patent and Trademark Office and compliance with government reporting obligations associated with federally funded inventions, amongst many other activities.

CONNECT WITH US

We hope this overview helps you understand and navigate key steps in technology transfer, and we look forward to working alongside you to bring your inventions to market. It is never too early to reach out to us for discussions of IP strategy and commercial opportunities, even before you have an invention that you think is ready for commercialization. If you haven't yet interacted with our office, please reach out to us at techventures@columbia.edu.

Thank you again for your interest in Columbia Technology Ventures.

TECHNOLOGY

TRANSFER

MARKETING &

LICENSEE SELECTION







Columbia Technology Ventures

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