

GUIDE TO THE OWNERSHIP, DISTRIBUTION, AND COMMERCIAL DEVELOPMENT OF MIT TECHNOLOGY

FOURTH EDITION



Technology
Licensing
Office



**Technology
Licensing
Office**

**TECHNOLOGY LICENSING OFFICE | MASSACHUSETTS INSTITUTE OF TECHNOLOGY
255 MAIN STREET, NE18-501, CAMBRIDGE, MA 02142-1601**

TEL: 617-253-6966 | FAX: 617-258-6790 | GENERAL EMAIL: TLO@MIT.EDU

PATENT EMAIL INBOX: TLO-ATTO@MIT.EDU

NEW DISCLOSURE SUBMISSIONS: TLO-NEWCASE@MIT.EDU

LICENSEE INVOICE QUESTIONS: TLO-INVOICE@MIT.EDU

FOR LAW FIRM INVOICES: TLO-LEGALBILLS@MIT.EDU

MIT USE OF NAME QUESTIONS: TLO-UON@MIT.EDU

TRADEMARK QUESTIONS: TLO-TRADEMARKS@MIT.EDU

IPIA QUESTIONS: TLO-IPIA@MIT.EDU

MATERIAL TRANSFER AGREEMENT QUESTIONS: MTAINFO@MIT.EDU

©2019 BY MASSACHUSETTS INSTITUTE OF TECHNOLOGY. ALL RIGHTS RESERVED.

FIRST EDITION PUBLISHED 2017. FOURTH EDITION OCTOBER 2019.

TO SEE REVISIONS TO THIS GUIDE, PLEASE VISIT [HTTPS://TLO.MIT.EDU/UPDATE-HISTORY](https://tlo.mit.edu/update-history)

TABLE OF CONTENTS

PART 1: INTRODUCTION

- 1.0 Intellectual Property and Related Rights
- 1.1 Patents and Patent Rights
- 1.2 Copyrights
- 1.3 Trade and Service Marks
- 1.4 Mask Works
- 1.5 Tangible Research Property
- 1.6 Trade Secret

PART 2: POLICY STATEMENTS

- 2.0 General Policy Statement
- 2.1 Patent, Tangible Research Property, and Copyright Ownership Policy Statement
- 2.2 Trade and Service Marks
- 2.3 Software In-Licensing
- 2.4 In-Licensing of Third-Party Materials
- 2.4 Waiver of Rights to MIT Inventors and Authors

PART 3: TECHNOLOGY EVALUATION, PROTECTION AND DISSEMINATION

- 3.0 Responsibility
- 3.1 Disclosure
- 3.2 Patents: Protection
- 3.3 Copyrights: Asserting and Registering
- 3.4 Trade and Service Marks: Asserting and Registering

- 3.5 Mask Works: Asserting and Registering
- 3.6 Tangible Research Property

PART 4: COMMERCIAL DEVELOPMENT

- 4.0 Introduction
- 4.1 Commercialization - General
- 4.2 Patents
- 4.3 Copyrights
- 4.4 Trade and Service Marks
- 4.5 Mask Works
- 4.6 Tangible Research Property
- 4.7 Licensing of MIT Rights to Inventors/ Authors
- 4.8 Royalty Distribution - General
- 4.9 Royalties - Special Cases
- 4.10 Conflict of Interest - Technology Licensing Office Staff
- 4.11 Committee on Copyrights and Patents

PART 5: INVENTIONS AND PROPRIETARY INFORMATION AGREEMENT

- 5.0 General Obligations
- 5.1 Personnel Invention and Copyright Agreements

TABLE OF CONTENTS

PART 6: ADMINISTRATION

6.1 Vice President for Research

6.2 Office of Sponsored Programs

6.3 Technology Licensing Office

INTRODUCTION

1.0 INTELLECTUAL PROPERTY AND RELATED RIGHTS

The material set forth in this document covers the ownership, distribution, and commercial development of technology developed by MIT faculty, staff, and students and others participating in MIT programs. These policies apply equally to the main campus, to the Lincoln Laboratory, and to other MIT programs. (Lincoln Laboratory employees are considered sponsored research staff for purposes of this document). The term “technology” is broadly defined in this document to include technical innovations, inventions, and discoveries, as well as writings and other information in various forms, including computer software.

The principal rights governing the ownership and disposition of technology are known as “intellectual property” rights, which are derived primarily from legislation granting patent, copyright, trademark and integrated circuit mask work protection.

In some instances, distribution and commercialization of technology may be accomplished by the transfer or licensing of the intellectual property rights, such as patents and copyrights. In other instances, distribution and commercialization of technology may be aided by or depend upon access to the physical or tangible embodiment of the technology, as in the case of biological organisms, plant varieties or computer software.

Therefore, this policy will define not only the ownership, distribution, and commercialization rights associated with the technology in the form of intellectual property, but will also define policies and procedures which govern use and distribution of the technology in its tangible form.

The following overview of intellectual property rights is limited in scope. The MIT Technology Licensing Office (TLO) should be contacted for further information regarding any of these rights.

1.1 PATENTS AND PATENT RIGHTS

A patent is a grant issued by the United States Patent and Trademark Office giving an inventor the right to exclude all others from making, using, or selling the invention within the United States, its territories and possessions, for a period which expires 20 years from the date of filing of the utility patent application.

Patents may also be granted in foreign countries; procedures for filing, regulations for patentability, and term of patent grant vary considerably from country to country.

To be patentable in most countries, an invention must be new, useful, and non-obvious. In the United States, a grace period of 12 months from the first written public disclosure of an invention is allowed to file a patent application. In most foreign countries, an invention is unpatentable unless the application is filed before public disclosure (written or oral). However, if one has filed in the United States prior to public disclosure, the applicant has 12 months to file in most non-U.S. countries without losing filing rights.

1.2 COPYRIGHTS

As provided in copyright law, a copyright owner has the exclusive right to reproduce the work, prepare derivative works, distribute by sale or otherwise, and display or perform the work publicly.

Under federal copyright law, copyright subsists in “original works of authorship” which have been fixed in any tangible medium of expression from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.

For an individual author, copyright protection of a work extends for the author’s life plus 70 years. For employers, copyright protection of a work extends for 95 years from the date of publication as of November, 1998.

In contrast to a patent which protects the “idea”, copyright covers the “artistic expression” in the particular literary work, musical work, computer program, video or motion picture or sound recording, photograph, sculpture, and so forth, in which the “expression” is embodied, illustrated, or explained, but does not protect the “idea.”

1.3 TRADE AND SERVICE MARKS

A trade or service mark is a word, name, symbol or device (or any combination) adopted by an organization to identify its goods or services and distinguish them from the goods and services of others. In the United States, trademark ownership is generally acquired through use of a term to identify origin of goods or services, although effective November, 1989, legislation enables organizations to file for trademark protection based on intent to use a particular term. Trade or service mark ownership is not dependent upon federal or state registration, but upon use of the mark. Registration of trade and service marks may be obtained on both the state and federal levels. However, to apply for a federal registration of a mark, it must be used in interstate commerce.

1.4 MASK WORKS

A mask work is defined as a series of related images representing a predetermined, three-dimensional pattern of metallic, insulating, or semiconducting layers of a semiconductor chip product. Under the Semiconductor Chip Act of 1984, mask work protection extends for 10 years and gives the owner of the qualifying mask work exclusive rights to its exploitation. Mask works are registered with the United States Copyright Office. Failure to apply within 2 years of the initial commercial exploitation results in the termination of the exclusive rights.

1.5 TANGIBLE RESEARCH PROPERTY

The term “tangible research property” refers to those research results which are in a tangible form as distinct from intangible (or intellectual) property. Examples of tangible property include integrated circuit chips, biological organisms, engineering prototypes, engineering drawings, and other property which can be physically distributed.

Although tangible research property may often have intangible property rights associated with it, such as biological organisms which may be patented or computer software which may be either patented or copyrighted, where appropriate, tangible research property may be distributed without securing intellectual property protection by using some form of contractual agreement, such as formal contract, loan agreement, letter agreement, or user license as further set forth in this document.

1.6 TRADE SECRET

The law of trade secret may be applied to almost any secret which is used in business and gives the owner of the trade secret a competitive edge over others. It is used to protect valuable proprietary information and is a commonly used form of protection for software. Unlike copyrights, there is no federal trade secret statute. Trade secret laws are determined by the individual states but generally adhere to similar principles. The most important aspect of this type of protection is that of secrecy. The protection will remain legally valid only as long as a trade secret is maintained. In order to maintain protection while a trade secret is being used, it is necessary to bind those individuals having access to the secret by a contractual agreement not to disclose it. Such agreements are called nondisclosure or confidentiality agreements.

MIT's policy with regard to the protection of third parties' confidential material used in conjunction with research projects is specified in the Institute's Research Policy Statements, which are available from the **Office of Sponsored Programs**.

POLICY STATEMENTS

2.0 GENERAL POLICY STATEMENT

The prompt and open dissemination of the results of MIT research and the free exchange of information among scholars are essential to the fulfillment of MIT's obligations as an institution committed to excellence in education and research. Matters of ownership, distribution, and commercial development, nonetheless, arise in the context of technology transfer, which is an important aspect of MIT's commitment to public service. Technology transfer is, however, subordinate to education and research; the dissemination of information must, therefore, not be delayed beyond the minimal period necessary to define and protect the rights of the parties.

2.1 PATENT, TANGIBLE RESEARCH PROPERTY, AND COPYRIGHT OWNERSHIP POLICY STATEMENT

With the exception of student theses as described in Section 2.1.5 "*Theses*" (see page 10), rights in inventions, mask works, tangible research property, and copyright ownership of materials, including software, made or created by MIT faculty, students, staff, and others participating in MIT programs, including visitors, are as follows:

MIT OWNED: Patents, software and other copyrights, mask works, and tangible research property and trademarks developed by faculty, students, staff and others, including visitors participating in MIT programs or using MIT funds or facilities, are owned by MIT when either of the following applies:

1. The intellectual property was developed in the course of or pursuant to a sponsored research agreement with MIT; or
2. The intellectual property was developed with significant use of funds or facilities administered by MIT, as defined in Section 2.1.2 "*Significant Use of MIT Administered Resources*" (see page 9).
3. All copyrights, including copyrighted software, will be owned by MIT when it is created as a "work for hire" as defined by copyright law, see Section 2.1.3 "*Works for Hire*" (page 9) or created pursuant to a written agreement with MIT

providing for transfer of copyright or ownership to MIT.

INVENTOR/AUTHOR OWNED: Inventors/Authors will own patents/copyrights/materials when none of the situations defined above for MIT-Ownership of intellectual property apply.

2.1.1 INTELLECTUAL PROPERTY OWNERSHIP UNDER SPONSORED RESEARCH AND OTHER AGREEMENTS

PATENTS: Research contracts sponsored by the Federal Government are subject to statutes and regulations which require MIT to acquire title in inventions conceived or first reduced to practice in the performance of the research. MIT's ownership is subject to a nonexclusive license to the government and the requirement that MIT retain title, report inventions, and take effective steps to develop the practical applications of these inventions by licensing and other means.

Contracts with other third-party sponsors require that MIT retain ownership of patents while the sponsor is granted an option to acquire license rights.

COPYRIGHT: Normally, research contracts sponsored by the Federal Government provide the government with specified rights in copyrightable material developed in the performance of the research. These contracts may grant the government sole title in such material resting solely in the government but more often require MIT to hold title in such materials and grant a royalty-free license to the government.

When a work is created under the terms of other sponsored research agreements, authors of copyrightable works should be aware that there may be contractual terms relating to the form of the report, advance notice to the sponsor before publication, and the like. Contracts with other third-party sponsors require that MIT retain ownership of certain copyrightable materials.

GENERAL: MIT personnel and visitors should contact the **Office of Sponsored Programs (OSP)** for information or assistance regarding interpretation of research contract terms; Lincoln Laboratory staff and visitors should contact their Director's Office. The terms of such sponsored research agreements apply not only to inventions

made by faculty and staff, but also to those made by students and visitors, whether or not paid by MIT, who participate in performing research supported by such agreements. It is essential, therefore, that all individuals participating in the research be made aware of their obligation to assign rights to MIT and sign Inventions and Proprietary Information Agreements as provided under PART 5 “*Inventions and Proprietary Information Agreements*” (see page 29).

2.1.2 SIGNIFICANT USE OF MIT-ADMINISTERED RESOURCES

When an invention, software, or other copyrightable material, mask work, or tangible research property is developed by MIT faculty, students, staff, visitors or others participating in MIT programs using significant MIT funds or facilities, MIT will own the patent, copyright, or other tangible or intellectual property. If the material is not subject to a sponsored research or other agreement giving a third party rights, the issue of whether or not a significant use was made of MIT funds or facilities will be reviewed by the inventor/author’s department head or center director and a recommendation forwarded to the TLO. This is done by completing the **Request for MIT Waiver** via the online disclosure system, available through the TLO website (<https://tlo.mit.edu>). The Vice President for Research will make the final decision on this issue and on any dispute or interpretation of policy relating to intellectual property.

MIT does not construe the use of office, library, machine shop facilities (except certain Beaver Works facilities), Project Athena, MIT-issued computers (including laptops and desktop computers), or communication and storage servers as constituting significant use of MIT space or facilities, nor construe the payment of salary from unrestricted accounts as constituting significant use of MIT funds, except in those situations where the funds were paid specifically to support the development of certain materials.

Textbooks developed in conjunction with class teaching are also excluded from the “significant use” category, unless such textbooks were developed using MIT administered funds paid specifically to support textbook development.

Generally, an invention, software, or other copyrightable material, mask work, or tangible research property will not be considered to have been developed using MIT funds or facilities if:

1. only a minimal amount of unrestricted funds has been used; and
2. the invention, software, or other copyrightable material, mask work, or tangible research property has been developed outside of the assigned area of research of the inventor(s)/author(s) under a research assistantship or sponsored project; and
3. only a minimal amount of time has been spent using significant MIT facilities or only insignificant facilities and equipment have been utilized. Use of office, library, machine shop facilities (except certain Beaver Works facilities), or MIT-issued computers (including laptops or desktop computers) and Project Athena, or communications and storage servers are examples of facilities and equipment that are not considered significant; and
4. the development has been made on the personal, unpaid time of the inventor(s)/author(s).

EXEMPT PROGRAMS:

Intellectual property developed using MIT funds or facilities by participants in, and solely in conjunction with, a specific MIT program established to support education in innovation or entrepreneurship that has been identified by the Vice President for Research (“Exempt Programs”), is exempt from the “significant use” category and owned by the inventor(s)/author(s), subject to the conditions described below. The Vice President for Research will maintain a list of the Exempt Programs found at <https://research.mit.edu/research-policies-and-procedures>.

If a participant intends on using or further developing MIT-owned Intellectual Property in an Exempt Program, the inventor(s)/author(s) must inform the TLO and their faculty supervisor, faculty advisor, research advisor, Principal Investigator, or equivalent, and obtain permission or rights from the TLO. Otherwise, the Intellectual Property developed in the Exempt Program will not be exempt from the “significant use” category.

2.1.3 WORKS FOR HIRE

EMPLOYEES: A “work for hire,” as defined by law, is a work product created in the course of the author’s employment. Copyright of the work product in these situations

belongs to the employer. For example, results of work assigned to staff programmers or writers of university publications are considered to have been created in the course of the author's employment and are the property of MIT. It is the policy of MIT that it shall own all works for hire.

NON-EMPLOYEES: Under the Copyright Act, copyright of commissioned works of non-employees is owned by the author and not by the commissioning party unless there is a written agreement to the contrary. All MIT personnel are cautioned to ensure that independent contractors agree in writing that ownership of the commissioned work is assigned to MIT, except where special circumstances apply, and it is mutually agreed that the author will retain ownership.

2.1.4 INDEPENDENT WORKS

MIT does not claim ownership of copyrights in scholarly books and textbooks, articles and other scholarly publications, nor to popular novels, poems, musical compositions, or other works of artistic imagination provided that such works are (i) created by the personal effort of faculty, staff and students; and (ii) do not make significant use of MIT-administered resources; and (iii) are not governed by the terms of a sponsored research or other agreement.

Furthermore, in those situations when such a copyright resides with MIT but does not constitute a "work for hire," MIT will upon the author's request and to the extent consistent with the intent of the sponsor and the center director or department head, convey copyright to the author of such work. An author requesting a waiver should submit a "**Request for MIT Waiver**" via the online disclosure system, available through the TLO website (<https://tlo.mit.edu/>).

2.1.5 THESES

The ownership of copyright in theses is set forth in Faculty Regulation 2.71. Students will own copyright in theses which do not:

1. involve research for which the student received financial support in the form of wages, salary, stipend, or grant from funds administered by MIT; or
2. involve research performed in whole or in part utilizing equipment or facilities

provided to MIT under conditions which impose copyright restrictions.

Where copyright ownership is retained by the student, however, the student must grant to MIT royalty-free permission to reproduce and publicly distribute copies of the theses.

NOTE: Where significant use is made of MIT equipment or facilities provided to MIT without copyright restrictions, students own copyright in theses, per (ii) above; however, software code, patentable subject matter and other intellectual property contained in the theses are subject to Section 2.1.2 “*Significant Use of MIT Administered Resources*” (see page 8).

2.2 TRADE AND SERVICE MARKS

Trade and service marks relating to goods and services developed at MIT will be owned by MIT.

2.3 SOFTWARE IN-LICENSING

When software and databases used at MIT are owned by users or third parties and are protected by copyright and/or other laws, or subject to license or other contractual arrangement, it is the policy of MIT that users abide by any legal restrictions or other contractual obligations imposed by the owner of the software or database. It is the responsibility of the owner of the protected software or database to make the nature of the restrictions known to MIT. MIT personnel and visitors should contact the Office of Sponsored Programs (OSP) for information regarding restrictions on use of third-party software or databases; Lincoln Laboratory staff and visitors should contact their Director’s Office.

2.4 IN-LICENSING OF THIRD-PARTY MATERIALS

When tangible property or other materials used at MIT in MIT research are owned by third parties, or subject to a use license or other contractual arrangement, users must abide by any restrictions or other contractual obligations imposed by the owner or provider of that material. The owner of the tangible property or material to will make

any such restrictions or obligations know to MIT at the time that MIT acquires the material. MIT personnel and visitors should contact the material transfer team of the TLO (mtainfo@mit.edu) for information regarding restrictions on the use of third-party tangible property or materials.

2.5 WAIVER OF RIGHTS TO MIT INVENTORS AND AUTHORS

When it has the right to do so, MIT may, if requested by the inventors or copyright authors and at MIT's discretion, "stand aside" in those situations where MIT believes that it would enhance the transfer of technology to the public, is consistent with MIT's obligations to third parties, and does not involve a conflict of interest as set forth below. By "standing aside", MIT agrees not to exercise its contractual rights to the technology, clearing the way for the MIT inventors and authors to seek ownership. Inventors and authors may request that MIT "stand aside" by submitting the "**Request for MIT Waiver**" via the online disclosure system, available through the TLO website (<https://tlo.mit.edu/>), in the case of software, invention, mask work, biological or other tangible material, or other copyright. In the case of a thesis, the authors should submit the "**Request for Statement of Waiver of MIT Copyright of Thesis.**"

In the case of Federal agency sponsorship, any "stand aside" by MIT for a patentable invention must be made by releasing the invention to the Federal government, following which the inventor may directly petition the agency for a release of rights to himself or herself. Federal research agreements are generally subject to a uniform patent law which requires that universities take title to resulting inventions subject to certain obligations concerning the exploitation in the public interest, Federal approval of any assignment of ownership, preferences for licensing, the retention by the Federal government of certain license rights, and march-in rights. Decisions by the Federal sponsors to permit individual inventors to acquire ownership are generally made on a case-by-case basis with the Federal Government retaining for itself those rights previously discussed.

Federal research agreements presently vary widely with respect to rights in copyrightable technical data and computer software, but in general universities have the right to copyright and to control distribution of most materials. Several major agencies retain a large degree of control over computer software and will relinquish

control only under limited circumstances.

In the case of other third-party sponsorship where the sponsor acquires license rights, MIT usually must seek approval of the sponsor prior to releasing its ownership rights in favor of the inventor or author.

TECHNOLOGY EVALUATION, PROTECTION AND DISSEMINATION

3.0 RESPONSIBILITY

The TLO is responsible for facilitating the transfer of MIT technology for public use and benefit. The TLO evaluates, obtains proprietary protection for, and assists in the distribution of technology for research purposes, as described in this PART 3. TLO also assists in the commercial development of selected technology by identifying potential markets and negotiating license agreements as described in PART 4 “*Commercial Development*” (see page 19).

3.1 DISCLOSURE

The initial step in establishing contact with the TLO is usually the submission of an MIT Technology Disclosure Form except at Lincoln Lab where clearance from the Lincoln Lab Directors Office is first required. When submitted, the **Technology Disclosure Form** will initiate action by the TLO to investigate the patenting (or other methods of intellectual property protection) and marketing of the technology unless accompanied by a letter or a “**No Significant Use of MIT Facilities or Funds/ Request for MIT Waiver.**”

SPONSORED PROGRAMS: The terms of sponsored research and other agreements normally create obligations with respect to the reporting of inventions, technical data, and copyrightable works such as software. In particular, inventions and copyrightable works developed under sponsored research should be promptly reported to the TLO by submitting a **Technology Disclosure Form**.

OTHER INVENTIONS: Inventions or technology developed at MIT either as work-for-hire or with significant use of MIT funds or facilities, should also be submitted to the TLO using a **Technology Disclosure Form**.

The Technology Disclosure Form serves to report technology to the TLO. A case number is given to the technology reported and the case will be assigned to a Technology Licensing Officer for evaluation.

3.2 PATENTS: PROTECTION

Although patent protection is sometimes sought for various noncommercial reasons, such as professional status, MIT will not seek protection for inventions which are not commercially attractive—even if the invention is intellectually meritorious—unless otherwise requested by the sponsor of the research. MIT will normally seek patent protection on inventions in order to pursue commercial licensing and to comply with the terms of sponsored research agreements. The procedures for obtaining patents on inventions are described in PART 4 “*Commercial Development*” (See page 19).

It is important to understand at the outset that any publication (or even verbal public disclosure) which describes an invention prior to filing for a patent may preclude patenting in foreign countries altogether, and may also preclude protection in the United States unless a patent is filed within one year from publication. The implications of publication upon patent rights should be discussed with the TLO and a decision on patent filing reached promptly so that publication will not be delayed.

3.3 COPYRIGHTS: ASSERTING AND REGISTERING

Copyright protection of books, articles, publications and computer software code is sought in order to recognize authorship and protect the integrity of the work. It is also essential in order for MIT to license copyrightable materials to commercial book publishers and others and to comply with the terms of sponsored research agreements.

A copyright is established at the time expression is fixed in a tangible medium. In order to maintain the copyright for the period prescribed under the copyright statute, notice of copyright must be affixed to the copyrightable material. Failure to affix the proper notice will cause the copyright to be lost after a certain period of time has elapsed from the first publication of the work.

The following notice is to be applied on MIT-owned works to protect the copyright:

“Copyright © [Year] MASSACHUSETTS INSTITUTE OF TECHNOLOGY. All rights reserved.”

The date in the notice should be the year in which the work is first published. No notice other than the foregoing is to be used for MIT-owned works.

Further, for added copyright protection, certain works should be registered with the United States Copyright Office using its official forms.

Questions concerning copyright notices and registration should be brought to the TLO.

3.4 TRADE AND SERVICE MARKS: ASSERTING AND REGISTERING

A trade or service mark may be used to protect those names and symbols associated with certain MIT activities and events and with certain technology developments such as computer programs. Prior to registration for trademark protection, the designation “TM” after a trademark or “SM” after a service mark will give adequate notice of a claim of ownership. The designation “®” for a trademark may only be used after Federal registration.

The use of trade and service marks to protect MIT owned technology or to designate MIT as the origin of a product, event, activity, service, or the like, may be instituted only at the direction of the TLO. It is important to note that trademark protection carries with it certain obligations on the part of the holder of the mark. Therefore, requests for use and registration of trade or service marks on behalf of MIT must be referred to the TLO.

3.5 MASK WORKS: ASSERTING AND REGISTERING

Protection of a mask work commences with the registration of its initial commercial exploitation. If registration for protection has not been made within two years of the initial commercial exploitation, mask work protection may be lost and the work entered into the public domain.

To protect mask work rights, the following notice is to be applied on all MIT-owned semiconductor chip products which incorporate mask works:

“Mask work “M” or (M) MASSACHUSETTS INSTITUTE OF TECHNOLOGY”

Questions concerning mask work notices and registration should be brought to the TLO.

3.6 TANGIBLE RESEARCH PROPERTY

Tangible research property (TRP) such as biological materials and computer software are frequently patented or copyrighted as appropriate and then licensed for commercial purposes.

However, these and other forms of TRP, including those under commercial license, generally are simultaneously distributed solely for research purposes either under simple letters of understanding or more formal licenses.

The following sections deal only with dissemination of TRP for research and other noncommercial purposes. Commercial licensing of TRP is covered in PART 4 “*Commercial Development*” (see page 19).

3.6.1 DISTRIBUTION OF TRP FOR SCIENTIFIC RESEARCH

In keeping with the traditions of academic science and its basic objectives, it is the policy of MIT that results of scientific research are to be promptly and openly made available to others. Since the traditional modes of dissemination through scholarly exchange and publication are not fully effective for most TRP, it is by MIT policy that those research results which have tangible form should also be promptly and openly made available to other scientists for their non-commercial scientific research, unless such distribution is inappropriate due to factors such as safety, the need to more fully characterize or develop the TRP prior to distribution, or unless such distribution is incompatible with other obligations.

3.6.2 CONTROL OF TRP

Where TRP is developed in the course of research which is subject to the terms of a sponsored research or other agreement, control over its development, storage, distribution, and use is the responsibility of the principal investigator, who will consult with the TLO or the Director's Office at Lincoln Lab. In other cases, significant use of MIT resources will be presumed, so control over TRP rests jointly with the center director or department head and with the TLO. The responsibility for control includes determining if and when distribution of the TRP is to be made beyond the individual laboratory for scientific use by others. These responsibilities also apply to TRP that originated with third parties and was given to MIT under a **Materials Transfer Agreement** or other agreement.

3.6.3 TRP WITH POTENTIAL COMMERCIAL VALUE

Scientific exchanges should not be inhibited due to potential commercial considerations. However, TRP may have potential commercial value as well as scientific value, and the principal investigator who may wish to make TRP available for scientific use in a manner which does not diminish its value or inhibit its commercial development should seek guidance from the TLO.

The normal mechanism for commercialization of TRP is through licensing agreements as set forth in PART 4 "*Commercial Development*" (see page 19).

3.6.4 TRP IDENTIFICATION

Each item of TRP should have an unambiguous identification code and name sufficient to distinguish it from other similar items developed at MIT or elsewhere. The TLO should be consulted for assistance in developing appropriate identification systems.

3.6.5 DISTRIBUTION OF BIOLOGICAL TRP TO RESEARCH COLLEAGUES

Biological materials may in some cases be patentable and licensed for commercial purposes under various types of patent licenses. They are also a form of tangible research property which can be distributed for commercial and/or research purposes

with or without patent protection.

Biological TRP owned by MIT may usually be distributed for non-commercial research purposes with only minimal conditions attached. Any such distribution is subject to an agreement by the recipient that commercial development or commercial use or further transfer of the biomaterial is not to be undertaken. In addition, the principal investigator may wish to control subsequent use, for example, by requiring recipients to follow a specific research protocol in the use of the biological materials.

When distributing biological TRP to research colleagues outside the laboratory, costs of the materials and handling may be recovered from the recipient, and returned to the account which funded those costs. When costs are charged for TRP distribution, adequate documentation must be maintained for audit purposes.

If there is a possibility of biohazard or other risk associated with the transport, storage, or use of a particular biological TRP, or if the recipient is likely to use the TRP for clinical research, the TLO should be contacted for advice on the appropriate form of disclaimers of liability and indemnities.

If the biological TRP was developed under a sponsored research agreement or obtained from third parties through a Material Transfer Agreement the TLO should be contacted to advise on possible contractual obligations with respect to the TRP prior to its distribution for noncommercial purposes. Distribution of biological TRP which is of the subject of a patent or patent application should be coordinated through the TLO.

3.7. OTHER TRP

Distribution of TRP other than biological TRP should follow the procedures outlined in this policy for computer software.

3.8 OPEN DISTRIBUTION OF COPYRIGHTED WORKS OTHER THAN SOFTWARE

Where consistent with MIT's obligations to third parties, MIT faculty, staff or student authors, with agreement of their center director or department head and all of their co-

authors, may request to have the works openly distributed through royalty-free licenses, or may request that the works be placed in the public domain.

Authors may request that otherwise copyrightable material, including computer software, be placed in the public domain if such action will promote widespread use, for example by providing a means to establish a new standard such as a computer operating system.

In responding to a request for placement in the public domain, MIT will weigh the advantages of improved access, the complexity of the work and whether or not it is ready for effective public use, whether its quality can be maintained, and the author's reasons for seeking this mode of dissemination.

3.9 DISTRIBUTION OF SOFTWARE FOR RESEARCH PURPOSES AND VIA OPEN SOURCE

The distribution of MIT-owned computer software to colleagues for research purposes must be coordinated with the TLO if the software has potential commercial value, if the principal investigator wishes to control subsequent use, or if it is subject to the terms of a sponsored research agreement.

The TLO will provide wording for the distribution agreement necessary to preserve commercial value and will arrange for trademark and copyright registration as appropriate.

The TLO should also be consulted if the authors of the software wish to distribute it via Open Source mechanisms. The TLO will advise on sponsor obligations, if any, and will advise on the acceptable forms of Open Source distribution to prevent any inadvertent effect on other MIT intellectual property.

COMMERCIAL DEVELOPMENT

4.0 INTRODUCTION

It has long been acknowledged that the primary functions of a university are education, research, and public service. It is in the context of public service that MIT supports efforts directed toward bringing the fruits of MIT research to public use and benefit.

In many cases, mere publication of research results will be sufficient to transfer MIT research to the public. In other cases, it is necessary to encourage industry, by protection of the intellectual property and the granting of license rights, to invest its resources to develop products and processes for use by the public.

4.1. COMMERCIALIZATION - GENERAL

The TLO will pursue the licensing of technology by researching the market for the technology, identifying third parties to commercialize it, entering into discussions with potential licensees, negotiating appropriate licenses or other agreements, monitoring progress, and distributing royalties to the inventors/authors in accordance with MIT royalty policy. When it is appropriate to do so, MIT may accept an equity position in partial lieu of cash royalties.

4.1.1 INVENTOR/AUTHOR ASSISTANCE

With few exceptions, the support and cooperation of the inventor/author is critical to licensing success.

4.1.2 INVENTOR/AUTHOR OWNED TECHNOLOGY

MIT faculty, staff, or students who wish to pursue the development of their independently-owned technology through the TLO may offer to assign their rights to MIT by submitting a **Technology Disclosure Form**.

Faculty, staff, and students are equally free to choose some other mechanism for commercializing their independently-owned technology, but prior to such commercialization should make sure that the technology is not subject to a sponsored research or other agreement, does not constitute a work-for-hire, nor results from significant use of funds or facilities administered by MIT. If any of these conditions might apply, the inventor/author should request from the TLO an appropriate license to the intellectual property or a waiver of MIT's rights as set forth in this PART 4.

4.1.3. COMMITMENT OF FUTURE INVENTIONS

MIT will not normally commit future inventions to licensees, even where improvements to technology are anticipated. Some very narrowly drawn exceptions may occasionally be appropriate to handle subordinate patents and well-defined derivative works for licensed software.

4.1.4 CONSULTING CONTRACTS

The TLO will not negotiate consulting contracts for individual inventors/authors as part of a license arrangement.

4.2 PATENTS

4.2.1 EVALUATION

Once a Technology Disclosure Form is submitted to the TLO, the assigned Technology Licensing Officer will begin the process of evaluating the invention for patentability, commercial potential and obligations to sponsors. The first step will typically be a meeting with the inventor. The TLO may also request that one of the inventors participate in a literature search of prior art.

4.2.2 SPONSORED PROGRAMS

If the invention arose from a sponsored research project, the TLO will file for a patent and negotiate an appropriate license consistent with the terms of the contract.

The TLO can advise about the specific patent terms of individual research agreements.

4.3 COPYRIGHTS

4.3.1 COMMERCIALIZATION BY THE TLO

Copyrightable works owned by MIT are normally licensed through the TLO except where other arrangements are made in accordance with this policy. Copyrightable material not owned by MIT may be licensed through the TLO when submitted under a Technology Disclosure Form to the TLO by its author and accepted for licensing by the TLO.

COMPUTER SOFTWARE: Computer software in which MIT acquires rights may be either patented or copyrighted and made available by MIT for commercial purposes through the TLO under various forms of patent or copyright licenses. Authors and their departments/laboratories will share in royalties earned from licensing as further set forth in this policy. If authors desire to distribute software for noncommercial research purposes which has been commercially licensed by the TLO to third parties, such licensing must be coordinated with the TLO.

VIDEO WORKS: This policy does not define commercialization and ownership rights to video works produced through use of MIT facilities or those which may be specifically commissioned by a department or center within MIT. Video works developed pursuant to an agreement will be subject to the terms of that agreement. The disposition of rights with respect to other MIT-owned video works will be made on a case-by-case basis until such time as a policy has been defined.

4.4 TRADE AND SERVICE MARKS

Trade and Service Marks owned by MIT are to be licensed through the TLO.

4.5 MASK WORKS

Mask works owned by MIT are to be licensed through the TLO. In general, mask works royalties will be allocated as set forth in Section 4.8 “*Royalty Distribution*” (see page 23).

4.6 TANGIBLE RESEARCH PROPERTY

It is MIT policy that any commercial distribution of MIT-owned TRP be handled only through the TLO.

If TRP developed by MIT is to be distributed to outside users for commercial purposes, the distribution agreement must contain provisions negotiated by the TLO covering the terms under which the property may be used, limits on MIT’s liability for the TRP or products derived therefrom, and other conventional license agreement terms including those relating to any intangible property rights (such as patents) which also may be associated with the use of the tangible property.

4.7 LICENSING OF MIT RIGHTS TO INVENTORS/AUTHORS

MIT faculty, staff, or student inventors or authors may also request a license to commercially develop their MIT-owned inventions or copyrighted materials where such licensing would enhance the transfer of the technology, is consistent with MIT obligations to third parties, and does not involve a conflict of interest. Such license will include the payment of appropriate royalties and required diligence to develop and disseminate the technology. Such arrangements will be subject to MIT’s **Conflict of Interest and Commitment policies**.

In the case of copyrighted materials that relate to major projects that typically involve multiple authors and long development periods, determining the most effective course for dissemination will require discussion and special negotiation with the TLO.

MIT will respond to author requests made under this policy within ninety (90) days. However, in those cases where the work, generally software, is not sufficiently developed to allow proper assessment, MIT may require additional development prior to responding to an author request.

4.8 ROYALTY DISTRIBUTION

Net royalty income received by MIT is distributed in the calendar quarter following the end of each fiscal year. Recipients are inventors, departments, and centers and interdisciplinary laboratories according to the formulae below; remaining royalties, after TLO office and patent expenses, are retained by the MIT General Fund. Royalties received by departments, interdisciplinary laboratories and centers, and by the MIT General Fund are, by policy and law, to be used only for educational and research purposes.

Royalty shares are calculated as follows:

A. CALCULATION OF INVENTORS' SHARES

For each Case (usually defined as the patents, software, or Tangible Property derived from a single Technology Disclosure), the distribution of inventor royalties derived from the Case is calculated as follows:

1. Deduct 15% Administrative Fee from Gross Royalty Income.
This deduction is directed toward covering the expenses of the Technology Licensing Office.
2. Then, deduct out-of-pocket costs not reimbursed by licensees and, in some cases, a reserve to arrive at Adjusted Royalty Income.
Out-of-pocket costs are direct assignable expenses to a specific case such as patent filing, prosecution and maintenance fees and specific marketing costs.
When out-of-pocket costs in the next MIT fiscal year are forecast and future income unlikely, a reserve may be deducted. Any excess reserve will be promptly distributed after forecasted costs are paid.
3. Distribute one-third of the Adjusted Royalty Income to the inventors/authors

(“the Inventors’ Share”). This distribution shall be contingent upon the inventors’/ authors’ adherence to the obligations of any applicable sponsored research agreement. The Inventors’ Share will be divided equally among all inventors unless all the inventors agree in writing to a different distribution.

B. CALCULATION OF ROYALTY SHARES FOR DEPARTMENTS AND CENTERS

Royalty income received by the TLO, net of Administrative Fees; distribution of royalties to inventors and third parties; and net of the TLO’s expenses of patent prosecution and maintenance is distributed to academic departments and interdisciplinary centers and laboratories pro rata based on the total net royalty income attributed to cases from each department, center or interdisciplinary laboratory using the following calculations:

1. Calculation of the Elements of Royalty Shares for Departments and Center

Calculate: “Case Contribution” for each case = Gross Case Royalties less Administrative Fee and Inventors’ Share. Also subtract share of royalties owed to third party joint owners or other third parties, if any

Sum: Case Contributions for each Department or Center = “Department/Center Case Contribution”

Sum: All Case Contributions for all Departments and Centers = “Total Case Contribution”

Calculate “Total Net Patent Expenses” = Total TLO patent expenses for the fiscal year minus all patent reimbursement payments received from licenses.

Calculate “Total Program Contribution” = Total Case Contribution minus Total Net Patent Expense

2. Royalty Shares for Departments and Centers

50% of Total Program Contribution is distributed among Departments and Centers proportional to their Department/Center Case Contribution

3. Contribution to the General Fund.

Remaining net income from Total Program Contribution and from the Administrative Fees are first used to cover TLO office and patent expenses, with the remainder going to the General Fund at the end of the fiscal year

NOTE 1: If the Vice President for Research determines that an inventor or author has caused a material breach of a sponsored research agreement, he or she may after investigation, but in his or her sole discretion, deny the inventor or author all or a portion of the royalty income from any inventions arising from such sponsored research agreement.

NOTE 2: The term “Centers” as used herein includes both Centers and Interdisciplinary Laboratories. Only Centers and Interdisciplinary Laboratories that are formally recognized by the Institute through access to the Laboratory Director’s Account are eligible to receive royalty income. Except as might otherwise be dictated by research contract obligations, the distribution of Department and Center royalties shall be based on (i) the organization (Department or Center) that administered the research contract from which the invention arose, and (ii) the academic Department affiliation of the inventors, if any, and shall be calculated as follows.

- a. If a research contract was not administered by a Center, the Department/Center share shall be allocated to the Department(s) with which the inventor(s) and research grant(s) are affiliated. Distribution to the Departments shall be pro rata based on the number of inventors affiliated with each Department.
- b. If a research contract was administered by a Center, the Department/Center share shall be split between the Center and the Department(s) with which the inventor(s) are affiliated. The distribution shall be according to the following algorithm per invention:
 - i. Each MIT inventor on the invention is allocated 2 points.
 - ii. If an MIT inventor has a Department affiliation, then the Department receives one point and the Center receives one point for that inventor. An MIT graduate student inventor’s Department affiliation is the Department in which the MIT graduate student is a degree candidate.
 - iii. If an MIT inventor (such as a Research Associate) does not have a Department affiliation, then the Center receives two points for that MIT inventor.
 - iv. If the MIT inventor is an undergraduate student, the Center receives two points for that MIT inventor
 - v. All of the points for the MIT inventors on each invention are then totaled for each Department or Center.

Attribution to the appropriate Department or Center for each Case is made in proportion to the points allocated.

4.9 ROYALTIES - SPECIAL CASES

4.9.1 IMPRACTICAL OR INAPPROPRIATE ROYALTIES

In some cases distribution of royalties to individuals will be impractical or inappropriate; for example, where the material was developed as a center project or where the authors/inventors are not easily identifiable. The Director of the TLO, in consultation with the principal investigator (or Center/Department head if not under a sponsored agreement) will review the circumstances of development when such situations have been identified. Generally in such cases, royalties will be split equally between the Department or Center and the MIT General Fund. In any situation when royalty distribution to individuals is not recommended, distribution of income is subject to the approval of the Vice President for Research.

4.9.2 DISTRIBUTION OF EQUITY

Effective July 1, 2018¹: If MIT acquires equity in lieu or partial lieu of royalties for intellectual property, MIT will, upon occurrence of a liquidation event, distribute cash to the inventors/authors according to the formula outlined in Section 4.8(A). “Calculation of Inventor’s Shares” (See page 23).

4.10 CONFLICT OF INTEREST OR COMMITMENT

4.10.1 CONFLICT OF INTEREST IN WAIVING TECHNOLOGY

Any of the following factors may signify a conflict of interest which will be taken into account prior to waiving or licensing MIT’s rights to inventors:

¹In licenses executed prior to July 1, 2018, where MIT had acquired equity in lieu or partial lieu of royalties for intellectual property, any inventor/author receiving an equity position in the company from the company did NOT share in MIT’s equity.

1. an adverse impact on MIT's educational responsibility to its students;
2. an undue influence on the employment commitment of the inventor/author to MIT in terms of time or direction of effort;
3. a detrimental effect on MIT's obligation to serve the needs of the general public;
4. potential conflict of interest as defined in MIT's **Policies and Procedures**.

4.10.2 CONFLICT OF INTEREST AND COMMITMENT - STARTUP COMPANIES

If the inventor/author holds or will shortly acquire an equity or founder's stock and/or option position in a small, tightly-controlled company to which the invention is licensed, MIT may accept equity in lieu of royalty only with the prior approval of the Vice President for Research. If the inventor/author will remain an employee of MIT after formation of the company in which he or she will acquire an equity position, the inventor/author will be required to sign a **Conflict Avoidance Statement**.

MIT will not accept research funding from a licensee in which an MIT inventor has an equity interest (including stocks, options, warrants or other financial instruments convertible into equity). Please refer to the Conflict of Interest **Application of Guiding Principles**.

4.10.3 CONFLICT OF INTEREST - TECHNOLOGY LICENSING OFFICE STAFF

In order to assure no present or potential future conflict of interest, an individual TLO staff member should not personally invest in non-public companies that have licensed MIT intellectual property. If a staff member is a partner in a venture fund, that staff member should not engage in licensing negotiations with any company in which that fund is invested, and those who are voting partners should not recommend MIT companies to that fund. TLO staff members also have a special responsibility to assure that their knowledge of a TLO license to a public company is not disseminated in any way that could affect the company's stock price, and that the knowledge is not used for investment purposes by themselves, their families, friends or business associates.

4.11 COMMITTEE ON COPYRIGHTS AND PATENTS

A standing Presidential Committee will oversee the operations of the TLO. The committee will include representatives from those fields of technology generally served by the TLO. This committee may, from time to time, elect to create a subcommittee of experts in a specific technology whose function is to recommend policy that relates to the exploitation of that technology.

INVENTIONS AND PROPRIETARY INFORMATION AGREEMENT

5.0 GENERAL OBLIGATIONS

It is the policy of MIT that individuals through their employment by MIT, by participating in an MIT-administered or sponsored research project, or by otherwise using MIT-administered funds or facilities, thereby accept the principles of ownership of intellectual property as dictated by MIT Policies and Procedures (section 13.1). In furthering such undertaking, all participants will sign the Inventions and Proprietary Information Agreement (IPIA) in accordance with the policy (MIT Policies and Procedures section 13.1.4).

5.1 PERSONNEL INVENTION AND COPYRIGHT AGREEMENTS

5.1.1 WHO MUST SIGN

Individuals at MIT who:

- (a) receive support from sponsored research or MIT-funded projects; or
- (b) otherwise may be in a position to make, conceive or reduce to practice inventions or otherwise engage in research or develop intellectual property under sponsored research or MIT-funded projects, whether or not salary or other support is received from such projects, or through the use of significant MIT-administered funds or facilities, must sign the IPIA. Note that this requirement specifically extends not only to MIT personnel but also to visiting scientists and fellows, students, or others.

5.1.2 ADMINISTRATION OF THE IPIA

Each MIT department or center is responsible for ensuring that all faculty, research staff (including visiting and affiliate research staff), and graduate students, students

participating in the Undergraduate Research Opportunities Program (UROP), and certain capstone projects have an IPIA on file with the TLO. The TLO is responsible for ensuring that it retains current and accurate IPIAs on file for all persons. Forms should be signed and collected at the time an individual's appointment is processed or, in the case of undergraduate students, prior to accessing the UROP application or commencing a relevant capstone course. Upon signing, the signatory should retain one copy and one copy should be sent to the TLO. Department files should reflect whether the IPIA was signed and collected.

As an individual's appointment status changes (e.g., transitions from an undergraduate to a graduate student or from a postdoctoral associate appointment to a research affiliate appointment), the appointing department should ensure that the TLO receives an IPIA which reflects the change in appointment.

Additional guidance specific for administrators and IPIA forms may be obtained from the TLO website (<https://tlo.mit.edu/>) or by request via tlo-ipia@mit.edu. The TLO will reasonably assist with any questions which may arise in connection with the collection, interpretation, or otherwise in the context of the IPIA.

ADMINISTRATION

6.1 VICE PRESIDENT FOR RESEARCH

The Vice President for Research is the final arbiter of any disputed issues of interpretation relating to this document. In unusual circumstances, the Vice President for Research may also authorize exceptions to the normal procedure.

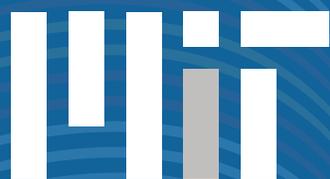
6.2 OFFICE OF SPONSORED PROGRAMS

The **Office of Sponsored Programs** (OSP) is responsible for the negotiation, execution, and administration of all MIT agreements with external sponsors of research grants and contracts and for ensuring that the rights of the sponsors in technology developed under external grants and contracts are protected.

Research priorities will have precedence over technology development priorities. Thus, no grant or contract terms are to be accepted which inhibit the utilization by the public of the results of research at MIT. In unclear situations or where there appears to be a conflict between the priorities, the Vice President for Research will be the final arbiter.

6.3 TECHNOLOGY LICENSING OFFICE

The TLO has two principal goals. The first is to facilitate the transfer to public use and benefit of technology developed at MIT. The second, where consistent with the first, is to provide an additional source of unrestricted income to support research and education at MIT. The TLO will work with the MIT developers of technology and with industry in a manner which does not interfere with the normal flow of technical and academic information through publications, conferences and consulting.



**Technology
Licensing
Office**

**TECHNOLOGY LICENSING OFFICE | MASSACHUSETTS INSTITUTE OF TECHNOLOGY
255 MAIN STREET, NE18-501, CAMBRIDGE, MA 02142-1601**

TEL: 617-253-6966 | FAX: 617-258-6790 | GENERAL EMAIL: TLO@MIT.EDU

PATENT EMAIL INBOX: TLO-ATTO@MIT.EDU

NEW DISCLOSURE SUBMISSIONS: TLO-NEWCASE@MIT.EDU

LICENSEE INVOICE QUESTIONS: TLO-INVOICE@MIT.EDU

FOR LAW FIRM INVOICES: TLO-LEGALBILLS@MIT.EDU

MIT USE OF NAME QUESTIONS: TLO-UON@MIT.EDU

TRADEMARK QUESTIONS: TLO-TRADEMARKS@MIT.EDU

IPIA QUESTIONS: TLO-IPIA@MIT.EDU

MATERIAL TRANSFER AGREEMENT QUESTIONS: MTAINFO@MIT.EDU