“DOCUMENTING THE TECHNOLOGY”

Chase Kasper
Assistant Vice President for Research
Technology Transfer & Corporate Relations
The Office of Technology Development (OTD) is responsible for the protection, development and commercialization of the University’s research innovations. We strive to proactively support USM in its mission of education, research and public service.

OTD serves the faculty, staff, and students of USM and the public by:

1) Fostering a culture that promotes creative invention, creative authorship, and innovation at USM.

2) Protecting USM generated intellectual property (IP) through patents, copyrights, trademarks, or other means.

3) Present technologies for potential applied use for public benefit via collaborative research, licensing of IP, and companies specifically interested in commercializing IP.
Technology Transfer In Universities

- 1925: WARF (University of Wisconsin)
- 1939: Washington State University
- 1940: Massachusetts Institute of Technology
- 1957: University of Minnesota
- 1970: Stanford University
- ~1980 to present: The rest of us…
  - University of Mississippi (1992)
  - Mississippi State University (1995)
  - University of Southern Mississippi (2013)
Commercialization Process

1. Research
2. Disclosure
3. Review & Evaluation
4. Licensing
5. Marketing
6. IP Protection
7. Revenue / Development
SO... What IS a “disclosure?”

For technology transfer purposes, there are two contexts for the word “disclosure.”

1. **Internal disclosure**: Communicating a discovery, innovation, or invention to the OTD

2. **Public disclosure**: Publications in books and technical journals. Poster sessions, slides, lectures, seminars which are open to the public, letters, even conversations can count as a disclosure.
The basic act of informing a party that one has made an invention is not considered a "public disclosure" of the invention.

In order to act as a patent bar, the disclosure must be enabling – in other words, it must teach someone "of ordinary skill in the art" how to actually duplicate the invention.
Public disclosure can include, but are not limited to, the following:

1. Written or oral disclosure, can be considered a public disclosure, unless the information was communicated in confidence (i.e. NDA). Disclosures to employees are not considered to be public disclosures.

2. Poster sessions, slides, lectures, seminars which are open to the public, letters, even conversations can count as a bar to patentability.

3. An "offer for sale" counts as a bar to patenting (after the one year "grace period") in the U.S. For example: Showing a product at a trade show could be considered as such.
The basic act of informing a party that one has made an invention is not considered a "public disclosure" of the invention.

In order to act as a patent bar, the disclosure must be *enabling* – in other words, it must teach someone "of ordinary skill in the art" how to actually duplicate the invention.
IMPORTANT

Conversations between OTD staff and USM employees regarding the disclosure of their invention are considered to be confidential in nature and do not constitute a “public disclosure.”
Mechanisms for internal disclosure include the Invention Disclosure Form (IDF) and the Software or Work Copyright Disclosure Form (SDF)

Components include:

- Inventors (or Developers)
- The Invention (or Software or Copyrightable Work)
- Invention Status
- Third-party Involvement
- Royalty Sharing
- The Signed Disclosure
Office of Technology Development

For USM Faculty/Staff
- Commercialization Process
- Opportunity Assessment
- Start-up Companies and MURA
- Policies/Procedures
- Presentations and Events
- USM Forms

For Business and Industry
Available Technologies
Related Links

Contact Information
Office of Technology Development
International Center, 413
118 College Drive #5012
Hattiesburg, MS 39406
Phone 601-266-4063
Contact Us

Find Building on Map

Fill 'em out!

OTD Forms

Invention Disclosure
Use this form if you have an invention to disclose to our office.

Software Disclosure
Use this form if you have a copy rightable work, such as an authored work or software code, to disclose to our office.

Material Transfer Agreement (MTA)

A Material Transfer Agreement (MTA) is a binding agreement which outlines the terms and conditions for the transfer of experimental materials coming into or going out of USM. The experimental materials can be of any nature, however, the most common are biological, chemical/physical, and electronic/software media. OTD negotiates MTAs and are signed on behalf of USM by the Vice President for Research.

The purpose of an MTA is to formalize the fact that one (or more) of the parties has a proprietary interest in a particular material and the other party intends to use the material for their own research purposes. Examples of materials include, but are not limited to: assay materials, monoclonal antibodies, biological specimens (fish, tissue), genomics libraries, DNA, and other biological and chemical laboratory reagents.
Invention
Disclosures
Inventors

Who is an “inventor?”

Individual(s) who contribute(s) to the conception of an invention and reduce it to practice.
Inventors

Who is an “inventor?”

Individual(s) who contribute(s) to the conception of an invention and reduce it to practice.

Conception – Happens when a definite idea of an invention, including every feature of the subject matter claimed, is known and able to be applied in practice.

Reduced to practice – An invention constructed and sufficiently tested to prove its usefulness for the intended purpose OR filing of an application for a patent directed to the invention.
Inventors

When it comes to determining inventorship, REMEMBER…

• The title of “Department Head” or “Supervisor” does NOT automatically qualify a person as an inventor.

• “Money does NOT an inventor make.”

• Individuals that only carry out work at the direction of the inventor are NOT considered to be inventors under patent law.
Inventors

When it comes to determining inventorship, REMEMBER…

• Application of a standard solution ("off the shelf") solution does not constitute inventorship.

• Identification of a problem without a solution does not constitute inventorship.

• There is NO such thing as "courtesy inventorship!"
Inventors

When it comes to determining inventorship, REMEMBER…

and last, but NOT least….

A patent that misstates the names of the inventor(s) may be declared INVALID and UNENFORCABLE resulting in the LOSS of the patent rights.
The Invention

• Title of the invention

• Date(s) of Conception – What records, notes, reports, sketches or other materials describe your invention exist?

• Any publications, presentations, or public disclosures?
The Invention

Identification of Prior Art – Also known as “background art” or “state of the art.” This may include any patents, patent applications, journal articles, and other literature relevant to the invention. Helpful to determine potential novelty of the invention.
<table>
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<th>Invention Status</th>
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Invention Status

- Why is your invention unique?
- Whose problem are you solving?
- What level of development is the invention?
Third Party Involvement

10-11
Third Party Involvement

1. NDAs and MTAs
2. Non-USM Co-inventors (to be discussed in Section 12)
3. Bayh-Dole Act (Government Rights)
4. Other pre-existing rights
Third Party Involvement

Non-Disclosure Agreements

• Also known as NDAs, CDAs, Confidentiality Agreements, etc.

• Useful tool to collaborate with other parties and not publicly disclose the invention
Material Transfer Agreements (MTAs)

Generally used when a party has a proprietary interest in a material that is used for research purposes.

In most cases, this can be a biological or physical substance.
Third Party Involvement

Material Transfer Agreements (MTAs)

**Incoming MTA:** Proprietary Material *belongs to an outside party* and will be used in USM research.

**Outgoing MTA:** Proprietary Material *belongs to USM* and will be used in an outside party’s search.
Third Party Involvement

Material Transfer Agreements (MTAs)

Intra-USM transfers of Material are NOT subject to MTAs.
Federal legislation passed in 1980

- Gave the right and responsibility to control and manage IP from federal sponsorship to universities

- Provided a mechanism for the government to track novel ideas related to federal research money
• Report each disclosed invention to the funding agency
• Elect to retain title in writing within a statutorily prescribed timeframe
• File for patent protection
• Grant the federal government a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced on its behalf throughout the world
• Actively promote and attempt to commercialize the invention
• Not assign the rights to the technology, with a few exceptions
• Share royalties with the inventor
• Use any remaining income for education and research
• Give preference to U.S. industry and small business

BAYH-DOLE ACT
(37 CFR 401)
Depending on the nature of the invention, there may be cases where there are “pre-existing rights.” Examples of this include:

- Research agreement where ownership of the intellectual property is owned by the sponsor or certain rights are granted to the sponsor.

- The invention is dependent upon the rights of another set of intellectual property rights to allow the invention to function (i.e. software).
Royalty Sharing
Royalty Sharing

• Co-inventors should agree up front on royalty sharing of any potential future revenue from the invention.
Royalty Sharing

- Co-inventors should agree up front on royalty sharing of any potential future revenue from the invention.

- Absent an agreement, inventors pro-rata share is used.

- A separate agreement must be negotiated with non-USM inventors (see Sects. 1 & 10).

- The royalty sharing agreement among USM inventors is generally used as a template to create a “Unit” Agreement (See Sect. 1).
The Signed Disclosure
The Signed Disclosure

• Submission of an IDF does not guarantee protection – confidentiality is still important! (see Sect. 4)

• Submitting an IDF to OTD is not a provisional or patent application.

• Keep in mind…..publishing, presenting, etc. and protection CAN co-exist **IF** the proper measures are taken!
The Signed Disclosure

Although the Invention Disclosure Form is *internal* to USM, it can have *external* implications.
Software & Copyright Disclosures
Authors, Developers & Creators
Developers

Individual(s) who contribute(s) to the creative product that first fixed in a tangible medium or form of expression.
Examples of creative works

• Musical works, including any accompanying words;
• Dramatic works, including any accompanying music;
• Pantomimes and choreographic works;
• Pictorial, graphic, and sculptural works;
• Motion pictures and other audiovisual works;
• Sound recordings;
• Architectural works; and
• Software.
Copyright rights

• To reproduce the work;
• To make derivative works based on the work;
• To distribute copies of the work to the public;
• To perform the work publicly; and
• To display the work publicly.
The Work
The Work

- Title of the work

- Date(s) of Conception/Completion – What records, notes, reports, sketches or other materials exist?

- Any publications, presentations, or public disclosures?
The Work

Identification of Prior Work – Is there an earlier version of the work? This may include:

- Previous titles
- Pre-existing works
- Copyrightable material added to the work
Work Status

8-9
Work Status

- Most important for software
- Does any documentation exist?
- Stage of development differs significantly from inventions
The “Third Party Sections,” “Royalty Sharing,” and “The Signed Disclosure” components of the Software / Copyright Disclosure Form are similar to the Invention Disclosure Form.
BENEFITS OF DISCLOSING

• Transfer new breakthroughs from the university to the public market place
• Generate economic development
• Keeps the funding agency engaged, happy, and excited
• Financial benefit to the researcher and the university
WHY TO DISCLOSE

Under “Bayh-Dole” a two-year “clock” starts ticking once an invention is reported – USM must determine whether to elect title to the technology and file a patent application.

**Solution**: Work with OTD to understand the commercial side of bringing an amazing idea to the market.
PUBLISHING AND PATENTING

- Yes -- you can do both!
  - U.S. Patents can be applied for up to 12 months after an initial public disclosure.
  - *Worse case scenario:* You published we need to patent in 12 months
  - *Best case scenario:* You disclosure early to OTD and we can work together so that you can publish and patent at your discretion
Questions?
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<tr>
<th><strong>Address:</strong></th>
<th>Office of Technology Development</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>118 College Drive #5012</td>
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<tr>
<td></td>
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