FROM DISCOVERY TO DISCLOSURE

Inventor's Action Guide

Complete this before you submit to your Technology Transfer Office

Introduction

Invention disclosure is the process that determines whether the work you have spent years building can be protected, commercialized, and used by the people it was designed to help. Most academic founders approach disclosure as bureaucratic red tape blocking company formation and product development, but that is shortsighted. The quality and timing of a disclosure shapes every option that follows.

If research is supported by federal funding the Bayh-Dole Act creates a legal requirement to disclose inventions to your institution, which in turn must report to the funding agency. More important than compliance, the disclosure process allows an institution's Technology Transfer Office (TTO) to participate in protecting and commercializing technology.

Timing

YOUR SITUATION	DO THIS NOW
No upcoming public disclosure	Disclose to your TTO now. Earlier is always better.
Paper or abstract submitted, not yet published	Contact TTO today. Submission may not be public disclosure, but publication will be.
Conference talk or poster in 4+ weeks	Disclose now and request expedited review. Most TTOs can file a provisional in time.
Conference or publication in under 2 weeks	Call your TTO today, not email. Ask about emergency provisional filing. US rights may still be saved.
Paper already published	Contact TTO today. US rights may survive the 12-month grace period. International rights are likely lost.

Preparation for TTO Meeting

The TTO will ask for this information and having these materials ready before your first meeting can accelerate the disclosure process.

The Invention

- A one-sentence description of what the invention does and what makes it different from existing solutions.
- A description of at least three different ways the invention could be implemented, which directly affects how broadly patent claims can be written.
- Explanation of what specifically makes this novel compared to prior work, to include any papers, patents, or products you are aware of.
- Figures, diagrams, or data that illustrate how it works.

Inventorship

- A list of every person who contributed to the core idea, not just who did the lab work. This is referred to legally as "contribution to conception" and should include name, institution, and role.
- Confirmation that student contributors have signed an IP assignment agreement, or a flag to TTO if unsure.
- A note if any co-inventor has had relevant prior employment that could create a competing IP claim.

Funding

- A list of every funding source that supported this research. This includes federal grants (with grant numbers), industry sponsors, state programs, and institutional funds.

Prior Disclosure

- A list with dates of every publication, preprint, conference presentation, poster, or abstract related to this work.
- A note on any conversations with industry contacts or investors where technical details were shared without a signed NDA.
- Your next public-facing deadline (paper, talk, poster) with the date.

Disclosure Form Preparation

Every TTO form is slightly different, but they all ask for the same core information. Here are ideas for addressing each section with a useful response.

Title

Describe what the technology does and how rather than stating the name of the research project that led to the development. A useful title names the application

domain and the technical mechanism.

WEAK	BETTER
Machine Learning for Biomedical Signal Analysis	Graph-Based Attention Method for Real-Time Cardiac Arrhythmia Detection in Wearable Devices

Summary

The summary should address three concepts in two to four sentences, written so a non-specialist understands why this matters:

1. The problem existing solutions cannot solve
2. What this approach does differently
3. The results or benefits

Technical Description

This is the most important section as a patent attorney uses it to draft claims. The description should cover these five elements:

ELEMENT	WHAT TO INCLUDE
The problem	Be specific. Name the limitation of existing approaches and why it matters in practice.
Your solution	Describe the mechanism in enough detail that a skilled colleague could reproduce it. Include figures.
What makes it different	State exactly which prior approach you are distinguishing from and what your approach does that theirs cannot.
Alternative implementations	Describe at least 3–5 variations. Claims that only cover your preferred embodiment leave gaps competitors can exploit.
Evidence it works	Data, prototype results, or validated model outputs. Not required to file, but critical for TTO evaluation.

Prior Art

List the closest existing work you are aware of, including papers, patents, and commercial products. For each, briefly state what it cannot do that yours can. The TTO will conduct a formal prior art search, so the goal here is to share what you know to support their work.

Disclosure and Publication History

List every public-facing communication about this work with dates: published papers, preprints, conference presentations, posters, and published abstracts. Note any conversations with outside parties where technical details were shared without a signed NDA. Flag your next public deadline prominently at the top.

Funding Sources

List every funding source with grant numbers. Federal funding triggers Bayh-Dole reporting obligations. Industry-sponsored research agreements may affect what rights can be licensed. Disclose everything and let TTO assess implications.

Commercial Potential

Identify the two or three most likely customer types or companies, what problem this solves for them, and what stage the technology is at. The TTO uses this section to prioritize evaluation and identify licensing targets.

Commercialization Preference

Indicate whether you are interested in startup formation, licensing to an existing company, or either. If you do not express interest in a spinout, the default path is usually licensing.

Submission Process

PHASE	WHAT HAPPENS	YOUR JOB
Acknowledgment (days–2 weeks)	TTO logs your disclosure, assigns a case number and technology manager.	Confirm receipt. Follow up if you hear nothing within two weeks.
Initial meeting (2–6 weeks)	Technology manager meets with you to discuss the invention and assess commercial potential.	Prepare thoroughly. Bring lab notebooks, figures, and market context. This meeting sets the trajectory.
Evaluation (4–12 weeks)	TTO assesses patentability and commercial potential, often with outside patent counsel.	Be available for follow-up questions. Slow responses here delay everything downstream.
Filing decision (2–4 months)	TTO decides whether to file and what type (provisional, non-provisional, PCT). You will be informed.	If TTO declines to file, ask for their specific reasoning. Options may include self-funded prosecution or technology release.
Claim review (if patent filed)	Patent attorney drafts claims based on your disclosure. You review before filing.	Read every independent claim carefully. Ask: does this cover all the embodiments I described? Could a competitor work around it?
Commercialization (ongoing)	TTO markets the technology to potential licensees or works with you on a startup path.	Stay engaged. Commercialization outcomes are significantly better when inventors participate actively.

Mistakes to Avoid

MISTAKE	WHAT TO DO INSTEAD
Publishing or presenting before disclosure	Contact your TTO before submitting any paper or abstract. A five-minute conversation can preserve rights that a two-minute oversight will permanently destroy.
Omitting a co-inventor	List everyone who contributed to the core idea regardless of seniority or whether they are still at your institution. Incorrect inventorship can invalidate a patent.
Incomplete funding disclosure	When in doubt, include the funding source. Your TTO determines the implications. Undisclosed funding discovered later creates serious compliance and licensing problems.
Thin technical description	Write the disclosure as if your patent attorney has never seen your work. Missing details cannot easily be added later.
Going silent after submission	Your TTO needs you accessible. Slow responses delay evaluation and can cause filing deadlines to be missed.
Forming a company before negotiating the license	Company formation before a license is in place leaves you with no legal right to use the technology your company is built around.

Key Terms

TERM	WHAT IT MEANS IN PRACTICE
Bayh-Dole Act	Federal law requiring universities to disclose and commercialize inventions made with federal funding. If any federal grant supported your research, Bayh-Dole applies.
Conception	The legal standard for when an invention exists: the moment you formulated a complete, operative idea. The date matters for potential derivation disputes.
Grace period (US only)	12 months after your first public disclosure to still file a US patent application. A safety net, not a strategy, and it does not exist in most other countries.
Inventorship	Legal status earned by contributing to the conception of at least one patent claim, not the same as authorship. Incorrect inventorship can invalidate a patent.
March-in rights	Federal government authority under Bayh-Dole to require licensing of a federally-funded invention if it is not being adequately commercialized.
Non-obvious	One of three patentability requirements: your invention must not be an obvious next step to someone skilled in your field.
Novelty	One of three patentability requirements: your invention must not have been previously disclosed anywhere in the world before your patent filing date.
PCT application	A single filing that preserves patent rights in 150+ countries for up to 30 months, deferring expensive national-phase filings while you develop commercialization strategy.

TERM	WHAT IT MEANS IN PRACTICE
Provisional application	A lower-cost US filing that establishes a priority date and 'patent pending' status for 12 months. Not examined; a non-provisional must be filed within 12 months to preserve the priority date.
Prior art	Anything publicly available before your filing date that describes your invention, i.e., papers, patents, products, presentations. Prior art can block a patent or narrow its claims.
Reduction to practice	Demonstrating the invention actually works: either a working prototype/experimental result (actual) or a sufficiently complete patent application (constructive).
Sponsored research IP clause	A provision in an industry-funded research agreement giving the sponsor rights in resulting inventions. Common. Must be reviewed before any commercialization decision.