

# DOE National Laboratory Patent and Licensing Practices Library

**Tara Gonzalez, PhD**

FLC Far West/Mid-Continent Regional Meeting

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## Background

Government Accountability Office (GAO) report on “Federal Research: Additional Actions Needed to Improve Licensing of Patented Laboratory Inventions,” GAO-18-327, in June 2018.

<https://www.gao.gov/assets/700/692606.pdf>

## Report Recommendation 5

The Secretary of Energy should ensure that the agency or its labs document processes for establishing financial terms, while maintaining flexibility to tailor the specific financial terms of each license.

## Management Response: Concur

*Negotiating terms for patent licensing is influenced by variety of different factors related to the condition of the technology and intended market as well as specific attributes of the parties. There are many complex and nuanced considerations that the professional licensing negotiator must always consider, including the: “readiness” of the technology and degree to which additional R&D or marketing investments may be needed; risk involved in those investments compared to incumbent and competing solutions; size of the market and its elasticity to adopting new technologies; license exclusivity, or non-exclusivity, and field of use; availability of inventor for continued co-development; and resources at the potential licensee to include financial, business, technical and marketing strengths. Especially for licensing negotiators of technologies developed at federal labs these factors are weighed against urgencies and alternate pathways to move the technology toward practical application. Because of the many and nuanced dimensions that impact license negotiations, it would be impractical to develop a prescriptive approach to establish patent license financial terms.*

*Several statutes including Bayh-Dole Act, the Stevenson-Wydler Act, the Federal Technology Transfer Act, and the National Competitiveness Technology Transfer Act of 1989 (NCTTA), authorize the contractor-operated DOE laboratories to retain title to inventions created using federal funding, pursue patent protection, and license those inventions to third parties. While DOE establishes certain requirements for its lab contractors related to licensing DOE technologies, those requirements relate to non-financial considerations such as U.S. Competitiveness and successor contractor issues. The financial portions of license agreements for national laboratory technologies are between the lab contractor and the licensing entity (licensee).*

*Nevertheless, the Department of Energy agrees that some standardization of practices by documenting minimum processes can mitigate some inconsistencies and ease efficiencies across the national labs. The DOE intends to encourage the labs that when practical with regard to time and funding resources, to make use of market analyses and benchmarking tools and services that are commercially available. DOE will coordinate with the labs to collect documentation and develop guidance that can guide the labs as they negotiate patent licenses especially for effective information gathering and basic guidelines for establishing and leveraging communities of practice. The documentation of internal best practices to be developed will complement the Licensing Guide and Sample License which was developed by DOE labs responsible for licensing patents and intended to raise awareness among potential licensees about general DOE patent license terms to be expected.*

## Management Response: Concur

*Negotiating terms for patent licensing is influenced by variety of different factors related to the condition of the technology and intended market as well as specific attributes of the parties. There are many complex and nuanced dimensions that impact license negotiations, it would be impractical to develop a prescriptive approach to establish patent license financial terms.*

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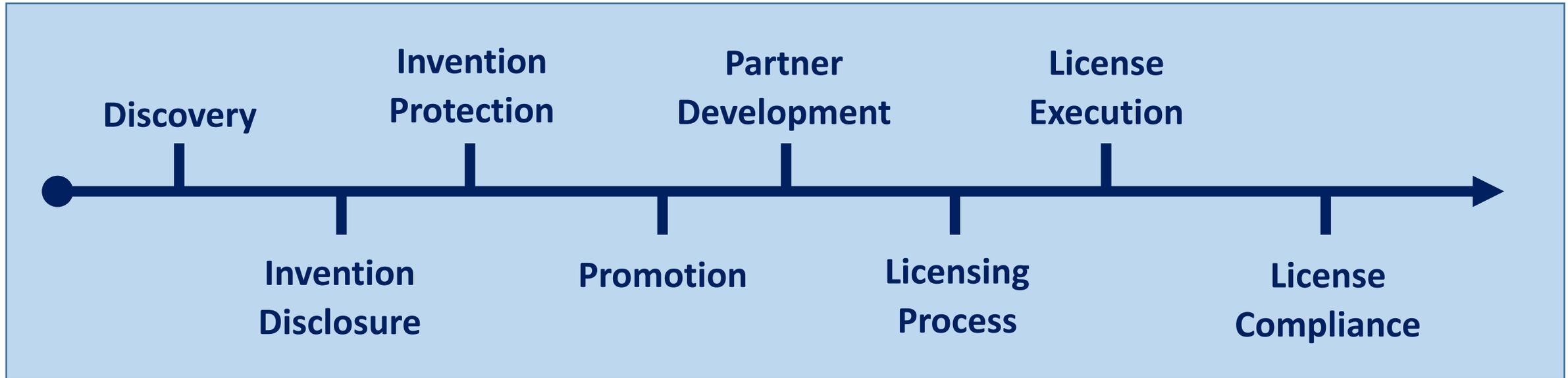
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## Scope

Documentation was gathered from the DOE, the DOE National Labs, the Technology Transfer Working Group (TTWG), and other publicly available sources.



<https://ttwg.org/doe/>

<https://ttwgorg.files.wordpress.com/2019/07/doe-national-laboratory-patent-licensing-practices-final.pdf>

## DOE Programs

### DOE National Laboratory Patent and Licensing Practices and Library of Patent and Licensing Documents **NEW!**

Click links above for DOE's new resource documents, which include public information on frequently used patenting and licensing practices. These documents aim to aid in the sharing of best practices among the labs and provide a source of information to aid potential licensees in navigating licensing practices across the DOE national lab system.

<https://ttwg.org/doe/>

### Poster Series: Advancing America Through Technology Transfer



### DOE National Laboratory Patent Licensing Practices

**Purpose:** This resource document has been developed in response to the Government Accountability Office (GAO) report on “Federal Research: Additional Actions Needed to Improve Licensing of Patented Laboratory Inventions,” GAO-18-327<sup>1</sup>, in June 2018.

Report Recommendation: The Secretary of Energy should ensure that the agency or its labs document processes for establishing financial terms, while maintaining flexibility to tailor the specific financial terms of each license. (*Recommendation 5*)

Management Response<sup>2</sup>: Concur

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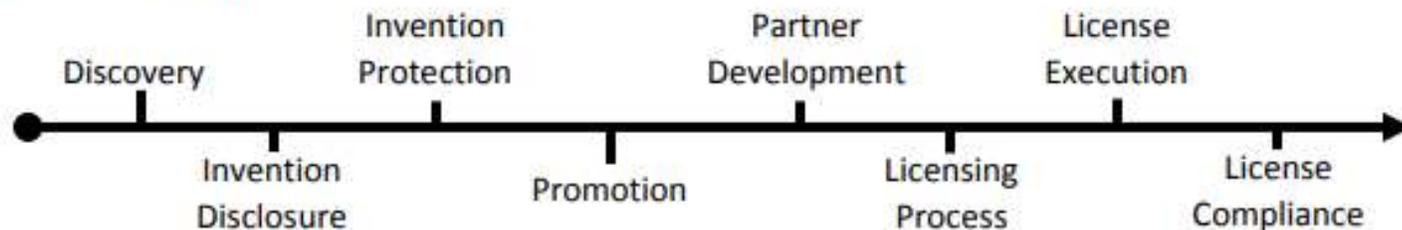
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<https://ttwgorg.files.wordpress.com/2019/07/doe-national-laboratory-patent-licensing-practices-final.pdf>

**Scope:** To this end, the Department coordinated with the national labs in the development of this documentation on practices, in an attempt to make consistent some of the approaches to negotiating patent license financial terms. Although specific processes for establishing financial terms cannot be prescribed from the Department level, we worked with the labs to document minimum processes in order to mitigate some inconsistencies and ease inefficiencies across the national labs.

The following documentation, gathered from the DOE, the DOE National Labs, the Technology Transfer Working Group (TTWG), and other sources, are related to the following 8 areas in the patent licensing timeline.

#### Patent Licensing Timeline:



#### Patent Licensing Practices Documentation Table of Contents

1. Discovery.....	4
A. INL Inventors Guide (2017) .....	4
B. LBNL Researcher Handbook (2015) .....	4
C. PPPL Publications, Invention Disclosures and Patents (2016) .....	4

<https://ttwg.org/doe/>

<https://ttwgorg.files.wordpress.com/2019/07/doe-national-laboratory-patent-licensing-practices-final.pdf>

## 1. Discovery

### A. INL Inventors Guide (2017)

Guidebook for laboratory researchers and inventors outlining the basics:

- IP, including inventions and patentable matter, patent strategy, copyright, and trademark;
- Licensing, including marketing and types of license terms;
- INL Startups; and
- Conflicts of Interest.

### B. LBNL Researcher Handbook (2015)

Handbook for laboratory researchers and inventors providing information on best practices to insure inventions are protected.

- Discusses lab notebooks, pre-publication review, and invention reporting;
- Demonstrates LBNL order of operations after the invention for diligence in disclosure and reporting; and
- Discusses patent filing types, marketing, licensing, COI, MTA and royalty distribution.

### C. PPPL Publications, Invention Disclosures and Patents (2016)

Slideshow for laboratory researchers identifying:

- When publishing and patenting should be explored, and why one should be selected over the other;
- The DOE requirements for publications being submitted to OSTI; and
- The PPPL order of operations from invention disclosure to royalty income.

<https://ttwg.org/doe/>

<https://ttwgorg.files.wordpress.com/2019/07/doe-national-laboratory-patent-licensing-practices-final.pdf>

Name	Type
1 Discovery	File folder
2 Invention Disclosure	File folder
3 Invention Protection	File folder
4 Promotion	File folder
5 Partner Development	File folder
6 Licensing Process	File folder
7 License Execution	File folder
8 License Compliance	File folder

Name	Type
INL Inventors Guide	Adobe Acrobat
LBINL Researcher Handbook	Adobe Acrobat
PPPL Publications Invention Disclo...	Adobe Acrobat

INL Inventors Guide.pdf - Adobe Acrobat Reader DC

File Edit View Window Help

Home Tools INL Inventors Guid... x

1 / 25 75% Share

## The Basics of INL Technology Transfer

INL has established a full technology transfer system to manage IP from the research planning stage to commercial product.

### Research Planning

Intellectual property and technology transfer should be considered during the research planning phase. Understanding the market, IP of others and INL's commercialization strategy during the planning phase can guide how research is conducted to achieve maximum impact. Depending on the circumstances, Technology Deployment can assist in evaluating the novelty of ideas (performing a prior art search), researching potential collaborators, obtaining market feedback on the value of ideas or exploring possible competitors.

When working with non-INL entities, it is very important to ensure agreements with such parties provide INL with the IP rights needed to continue the research and deploy the technology. For example, INL's standard subcontracting terms often only grant the laboratory the right to use software that a subcontractor develops for internal purposes and may not allow INL to transfer software to others. Researchers and managers should work closely with their CM to ensure the correct use of IP terms in subcontracts and cooperative agreements with third parties.

### Research and Development

Observations and experiments during research activities often lead to discoveries and inventions. It is important that researchers develop the ability to recognize inventions that might be patentable and record them as they occur.

### Disclosure

BEA's employment contract requires employees to disclose new inventions. An invention should always be made known to TD before any public enabling disclosure to allow TD time to take

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graph TD;
  A[Research Planning] --> B[Research & Development];
  B --> C[Disclosure];
  C --> D[Assessment];
  D --> E[Patenting Decision];
  E --> F[Marketing];
```



## 8 Documents

- General resource documentation
- National Laboratory specific protocols
- Disclosure protocols for online systems
- Worksheets on IP Contributors and software developers

- DOE Technology Transfer Mechanisms – IP Day Slides (2018)*
- BNL Record of Invention Guidelines*
- LBL Record of Invention*
- LBL Contributors to the Invention*
- LBL Online ROI Submission Process*
- LBL New Online Software Disclosure Submission*
- LBL Developers to the Disclosure*
- LBL Third Party Software Worksheet*



### 3 Documents

- Andrew Toole, USPTO, presentation on the role patents play in the economy and government patent trends
  - National Laboratory guides on patenting determination, costs, and trends
- A. *Government Interest Patents-When Public Investment Feeds Innovation (2018)*
  - B. *BNL Patent Protection and Licensing Procedure*
  - C. *PPPL IP Matters (2017)*



<http://labpartnering.org/>



## 4 Documents

Methods for engaging with the laboratory, including sponsored research (SPPs and ACTs), collaborative research (CRADAs), licensing lab technologies, and facility usage.

- A. *FNAL Licensing Guidelines*
- B. *LBNL FAQ for Industry*
- C. *LLNL Partnering Guidelines*
- D. *How PNNL Can Help Your Business Succeed*



## 16 Documents

- DOE specific guidance documents
- AUTM's Nine Points
- Laboratory licensing process guidelines
- Laboratory licensing overviews
- Laboratory licensing applications/candidate questionnaires

- |   |  |
|---|--|
| A. <i>Stevenson-Wydler Royalty Use</i>  | I. <i>Sandia Licensing Overview</i>            |
| B. <i>ANL DOE implementation of DEAR</i>  | J. <i>Licensing Berkeley Lab Technologies</i>  |
| C. <i>In the Public Interest: Nine Points to Consider in Licensing University Technology (2007)</i> | K. <i>PNNL Licensing Guidelines</i>            |
| D. <i>INL Licensing Process</i>   | L. <i>NETL Sample License Application</i>      |
| E. <i>NREL Licensing Process</i>  | M. <i>ANL Commercialization Plan Worksheet</i> |
| F. <i>PNNL Licensing Process</i>  | N. <i>NREL Candidate Questionnaire</i>         |
| G. <i>Sandia Licensing Principles</i>   | O. <i>ORNL License Application</i>             |
| H. <i>LANL Licensing Technology</i>   | P. <i>SRNL Licensing Guide</i>                 |



## 6 Documents

- TTWG Licensing Guide
- Sample License Agreements
  - Exclusive, nonexclusive samples
  - Start-up specific
- Inter-institutional sample agreement

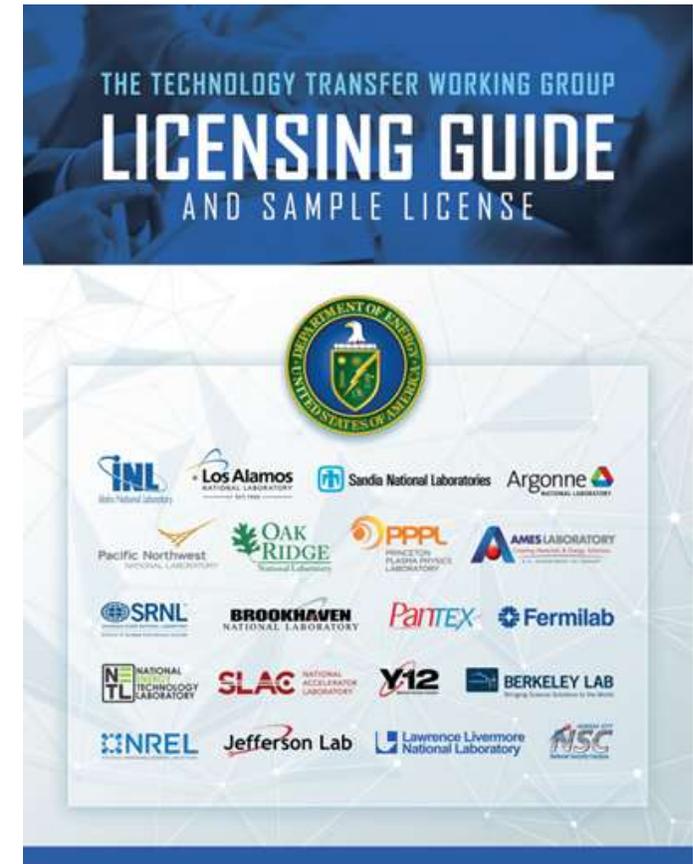
- TTWG Licensing Guide*
- NREL Exclusive Patent License Agreement*
- NREL Nonexclusive Patent License Agreement*
- PNNL Exploratory License Agreement*
- Pantex/Y-12 Start-Up Xpress Terms License Best Practice*
- Inter-Institutional Agreement*

## Licensing of DOE National Laboratory Patented Technologies

<https://www.energy.gov/technologytransitions/downloads/ttwg-licensing-guide>

<https://ttwg.org/resources/>

- Discusses common terms for licensing:
  - Consideration
  - Performance Requirements
  - Business Plan Requirements
  - Field of Use / Exclusivity
- Sample License





## 6 Documents

### LLNL Reporting Templates for licensees

- Before commercial sales
- Report of first commercial sale
- After commercial sales (govt use and non-govt use)
  - Quarterly and semiannual

- LLNL Progress Report: Before the First Commercial Sale*
- LLNL Report of First Commercial Sale*
- LLNL Quarterly Royalty Report: After the First Commercial Sale Non-Government Use*
- LLNL Quarterly Royalty Report: After the First Commercial Sale Government Use*
- LLNL Semiannual Royalty Report: After the First Commercial Sale Non-Government Use*
- LLNL Semiannual Royalty Report: After the First Commercial Sale Government Use*

## For more information:

**Tara Gonzalez, PhD**

Technology Transitions Program Analyst

[Tara.Gonzalez@hq.doe.gov](mailto:Tara.Gonzalez@hq.doe.gov)

(202) 287-5747



U.S. DEPARTMENT OF  
**ENERGY**

Office of  
Technology  
Transitions