

The Technology Transfer Process

Technology transfer involves moving an invention or piece of software from the Lab to the marketplace, usually by licensing it to a company that further develops the invention and commercializes it.

Invention and Reporting: The technology transfer process begins with an invention. Next, the inventor submits a Record of Invention form to the Lab's department for Technology Transfer and Intellectual Property Management.

Assessment: Tech Transfer staff assesses the commercial potential of the technology.

Intellectual Property Protection: The Lab may seek patent protection for those technologies that are expected to be commercially valuable. Our patent attorneys work with the inventors on this process.

Marketing and Licensing: Tech Transfer promotes the invention on the web and via targeted mailings. When a company with the potential to successfully bring the invention to market is interested, Tech Transfer negotiates a license with that company.

Royalty Income: The revenue generated from a license is first applied towards reimbursing patent costs, then is distributed to the inventors (who, under current policy, get 35%), their scientific divisions (which get 15%), and the Lab's central research pool (which gets 50%).

For **software**, the developer submits a Software Disclosure and Abstract form and LBNL may seek copyright or patent protection. Tech Transfer licensing staff meets with the developer to devise a distribution strategy that best meets the needs of the research agenda, potential users, and the Lab. It is necessary to keep track of any third party code used so that the software can be distributed later on, whether free of charge or for a fee.

Over 119,000 copies of Berkeley Lab software were downloaded last year.



"Technology transfer is an essential part of fulfilling Berkeley Lab's mission and having maximum impact; as we continue to make fundamental discoveries and do important applied research, we must also look for new ways to ensure the practical use of our inventions by industry. I look forward to growing our efforts in this area."
– Paul Alivisatos, Lab Director

FAQs

Is a Record of Invention (ROI) the same as a patent?

No. A Record of Invention is an internal Lab document written by the inventor and submitted to the Lab's Tech Transfer Department. Once your ROI has been reviewed by Tech Transfer, a staff member will contact you and a decision will be made as to whether or not a patent application will be filed. Simply submitting a ROI does not protect intellectual property rights. A patent application is a detailed document written by the Lab's patent attorneys and filed with the U.S. Patent and Trademark Office (USPTO).

When should I submit a Record of Invention (ROI)?

The ideal time is after you have built a physical model demonstrating that the invention works and before it has been published or publicly presented. Even if your invention is not reduced to practice, to fully protect U. S. and foreign patent rights you should submit a ROI before any publication or presentation that describes its core concepts.

A software abstract and disclosure should be submitted a few months before completion of the software or as soon thereafter as possible. Software must be formally reported before you distribute it to anyone outside of LBNL or DOE, even if distributed for free.

Report your inventions!

If you believe that you have invented something that is unique and may be commercially useful, you should submit a Record of Invention form to the Tech Transfer Department. The brief form asks for information about the invention, funding, and potential uses.

You can find forms at: www.lbl.gov/tt – go to "For Researchers," then "Forms and Policies."

Are publishing and getting a patent both possible for a given invention?

Yes, publishing and patenting are completely compatible *if* the Lab files for patent protection before you first publish. Contact Tech Transfer before you publish or speak publically about an invention so that we can take appropriate action to protect it.

What might I inadvertently do that would jeopardize getting a patent?

Some or all patent rights may be lost if you make a public disclosure before Tech Transfer files a patent application. A disclosure includes any publically available written, electronic, or oral description of the invention. Internal disclosures to Lab employees are fine. Please contact our Patent Group (x7058) for advice before you publish or present.

What is a Non-Disclosure Agreement?

The Tech Transfer Department can arrange a Non-Disclosure Agreement (NDA) that allows you to have a confidential discussion about your technology with non-Lab personnel or lets you receive proprietary information from a third party.



Ashok Gadgil with his invention - a water purifier that uses UV light and is affordable in developing countries



"In many ways, this project is a dream project: interesting science, high technology, rapid transition from the bench to the bedside, and most important, critical need."

– Jay Keasling, CEO of the Joint BioEnergy Institute and inventor, on finding a way to produce an affordable antimalaria drug

Photo by Peg Skorpinsky

Why does the Lab patent inventions?

We protect intellectual property for a number of reasons. It makes the invention more attractive to licensees because they are more likely to recoup their R&D costs by securing rights to the technology for some time. Patenting also ensures that the Lab and inventors receive credit for the invention and a share of any income it generates.

How do you decide which inventions to patent?

Patenting in no way reflects on the scientific merit of an idea. The primary criterion for patenting is the likelihood of successful commercialization. Given a limited budget, the process for determining what gets patented is highly competitive.

What if I have a great idea and want to start a company?

You must first file a Record of Invention (ROI), as this starts the process. For more information on this topic, please see the "For Researchers" section of the Tech Transfer website.

What role do inventors play in choosing a licensee?

In order to prevent a conflict of interest, the inventor does not determine who will license a given technology. However, Tech Transfer often consults with inventors in assessing the capabilities of potential licensees.

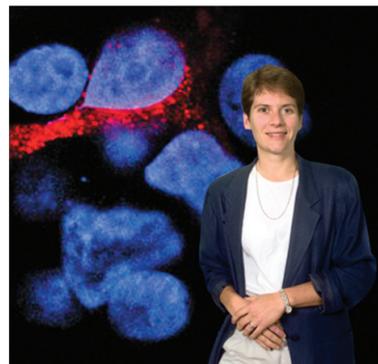
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www.lbl.gov/tt

KEEP A LAB NOTEBOOK

Keep a record of your research by regularly using a lab notebook. It can prove critical for the protection of your intellectual property.

- Use ink on consecutive pages of a standard lab notebook.
- Date entries, identify subject matter, and explain formulas and graphics.
- Periodically have someone look over your entries and witness them by adding their signature and date, especially for first descriptions of inventions.

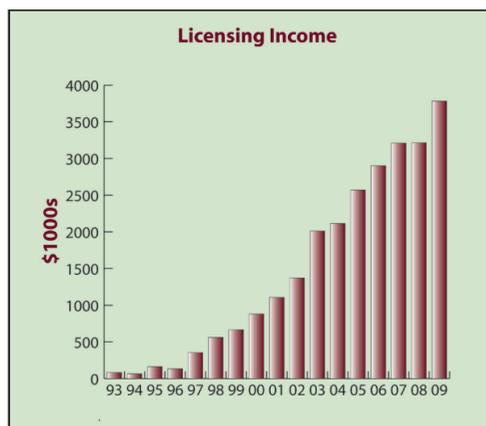


"There is nothing more satisfying than seeing the knowledge we produce in our basic research applied in a manner that impacts society; [it] is a key step in the process of economic growth as well."

- Carolyn Bertozzi, LBNL Faculty Senior Scientist; T.Z. and Irmgard Chu Distinguished Professor of Chemistry and Molecular and Cell Biology, UC Berkeley

Selected Start-ups

Nanosys	Symyx Technologies	Cargo Technology (acquired by Cold Pack Systems)
Solexant	Berkeley HeartLab (acquired by Celera)	
Nanomix	WaterHealth International	Syrxx (acquired by Takeda San Diego)
Seeo		
Carrier Aerospaceal	Artery Therapeutics	Quantum Dot Corp. (acquired by Life Technologies)



WHO TO CALL

For questions about inventions, conflicts of interest, or disclosing an invention:

Technology Licensing
Viviana Wolinsky x6463

Tech Transfer Dept. Head
Cheryl Fragiadakis x7020

Technology Marketing
Pam Seidenman x6461

Patent and Copyright
x7058

Sponsored Research
x6873

Technology Transfer for Berkeley Lab Researchers

MANAGE CONFLICT OF INTEREST

Potential conflicts of interest can arise if you plan to:

- engage in consulting activities;
- establish a professional relationship with a company; or
- become involved in any way with a company that may license your technology or fund your research.

Alert us early so we can help analyze, eliminate, or mitigate any conflict.

Selected Licensees

Genentech	CooperVision	Bristol-Myers Squibb
Shell	Eli Lilly	Gatan
Maxon	Fairchild Imaging	Sigma-Aldrich
Chiron	Pfizer	Pathway Diagnostics
ConocoPhillips	Adelphi Technology	eV Products
GlaxoSmithKline	Affymetrix	Siemens
Quest Diagnostics	Digirad	Full Spectrum Solutions
RoseStreet Labs	MKS Instruments	Dakota Technologies

