Abstract

Patents, licensing, and technology transfer have become increasingly important to universities and research centers, as well as to individual scientists. A survey of 190 research institutions by the Association of University Technology Managers reveals that scientists from these institutions generated 13,032 invention disclosures, 6,375 new patent applications and 3,764 patents in the year 2000. Scientists have a direct stake in this process as well, since they receive a percentage of the profits from a successful licensing of their patents.

A researcher attempting to move an idea from concept to commercialization will encounter different informational needs throughout the process. Staff of the Technology Transfer Information Center (TTIC), National Agricultural Library, U.S. Department of Agriculture, have monitored these needs since 1989 and have developed a "research to technology transfer continuum" diagram to show how librarians can systematically contribute information that leads to key decision making related to science and engineering research and technology commercialization endeavors.

Staff from TTIC and the University of Maryland, College Park libraries work with government and university researchers, technology transfer professionals and private sector entrepreneurs to provide patent, business and market information that contributes to the development of new products, processes and services. This poster will portray the research and technology transfer continuum and showcase the information inputs librarians contribute to the process.

What is Technology Transfer?

The process by which existing knowledge, facilities or capabilities developed under federal R&D funding are utilized to fulfill public and private needs.

- Federal Laboratory Consortium for Technology Transfer (FLC)

'technology transfer' describes the formal transfer of new discoveries and innovations resulting from scientific research conducted at universities and nonprofit research institutions to the commercial sector for public benefit. The process of tech transfer is one of the most active growth sectors of the global economy and is quite exciting - especially when you consider the implications.

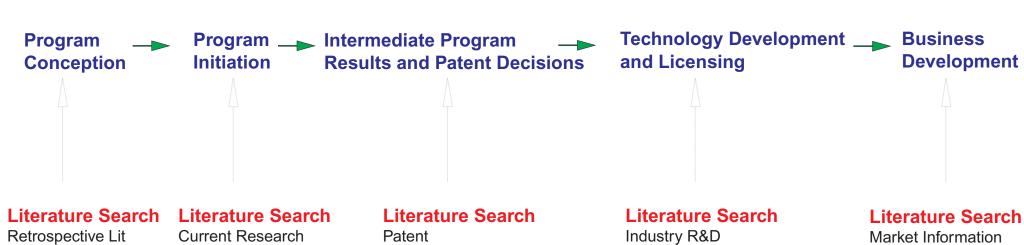
- Association of University Technology Managers (AUTM)

The Librarian and Technology Transfer

Michael Shochet,* Librarian

Technology Transfer Information Center, National Agricultural Library Agricultural Research Service, U.S. Department of Agriculture and University of Maryland, College Park

Research and Technology Transfer Continuum with Information Component



Patents Funding Industry R&D Partners Funding **Grant Writing**

Developed by: Kate Hayes Michael Shochet **Technology Transfer Information Center** National Agricultural Library Agricultural Research Service U.S. Department of Agriculture May 2003

Subject Market Size Industry Trends Needs Assessment **Technology Valuation** Manufacturers & Suppliers Industry R&D

Technology Transfer = Partnerships: Librarians and Scientists

Technology Transfer is all about forming partnerships. While most of these partnerships pertain directly to turning an idea into a reality, the process of commercializing an

Entrepreneurs & **Small Businesses** Manufacturers & Suppliers **Test Facilities Technical Assistance** Technology Valuation Competitive Intelligence

Marketing Targets **Business Plan Writing** Venture Capital Incubators Grants Suppliers

Program Conception: A scientist has a new idea

The researcher needs to:

- Determine if the idea is truly novel
- Find related research
- Find Funding
- Form Partnerships

Librarians can assist with:

- Searching for relevant literature
- Searching patent databases
- Looking for sources of funding

Program Initiation: Beginning the research

The researcher needs to:

- Conduct experiments
- Find funding
- Identify potential partners

Librarians can assist with:

- Keeping researchers current on new research in the field
- Finding other individuals/organizations/companies conducting similar research
- Identifying funding opportunities
- Providing information on grant writing

Intermediate Program Results & Patent Decision: Evaluating the research in context

The researcher and the organization need to:

- Assess the research progress
- Review new results of any related research
- Determine the potential market for the invention
- Decide whether to patent
- Decide whether to partner for further development

Librarians can assist with:

- Searching for new patents and literature
- Searching databases for market information
- Finding data to help determine the technology's potential value
- Identifying manufacturers who could become R&D partners or licensees

Technology Development and Licensing: Finding organizations interested in the technology

The researcher or organization needs to:

- Find a company interested in licensing or developing the technology
- Find facilities to test an idea or create a prototype

Librarians can assist with:

- Searching databases and directories for manufacturers and suppliers
- Examining directories of research facilities and capabilities
- Finding information on setting royalty rates
- Providing competitive intelligence

Business Development: start-ups and spin-offs:

The inventor needs to:

- Find investors/funding
- Create a business plan

Librarians can assist with:

- Finding market information and statistics
- Providing information for creating a business plan
- Identifying venture capital firms
- Locating resources for a small company: suppliers, incubators, etc.

invention is not done in isolation. Although often overlooked as potential partners, librarians can make important contributions towards technology transfer. Researchers, entrepreneurs and technology transfer staff have a variety of information needs - patents, funding, markets, suppliers, competition, etc. - that could benefit from the skills of information sleuths. Technology transfer provides an opportunity to demonstrate the value of libraries and their information services; establish relationships between librarians and researchers, laboratories and departments; and form lifelong partnerships with researchers and technology transfer staff.

*Mr. Shochet's position is funded by a cooperative agreement between the National Agricultural Library and the University of Maryland, College Park.

¹ Pressman, Lori, et.al. "AUTM Licensing Survey: FY 2000. Survey Summary". Northbrook, IL: Association of University Technology Managers. 2002 Accessed 10/25/02. http://www.autm.net/surveys/2000/summarynoe.pdf