



FLC

Federal Laboratory Consortium
for Technology Transfer

What is the FLC?

- The Federal Laboratory Consortium (FLC), is a nationwide network of more than 300 federal labs moving innovative technologies developed by federal labs into the marketplace.
- The FLC represents a collective strength of more than \$150 billion invested annually in R&D by the federal government.
- The FLC was organized in 1974 and formally chartered by the Federal Technology Transfer Act of 1986 to promote and strengthen technology transfer nationwide.



What is Technology Transfer?

Technology transfer is the process by which existing knowledge, facilities or capabilities developed under federal research & development (R&D) funding are utilized to fulfill public and private needs.



Why is Technology Transfer So Important?

- Technology transfer has the power to impact our economy, society, and national security.
- Every year, billions of American taxpayer dollars go into funding (R&D) at our federal laboratories.
- The intent of the R&D is to provide a return on that investment by advancing science and technology discoveries and moving those innovations from the laboratory to the marketplace.



Federal Technology Transfer Goal

Federal technology transfer benefits industry partners due to:

- Availability of unique facilities and equipment
- Experienced federal scientists and engineers

Federal technology transfer success is measured by **YOUR** success.

Goal is for private industry partners to take federal innovations to the marketplace to manufacture, distribute, and sell.

How Federal Innovation Is Transferred

Private industry can work with federal labs to move federal innovation to the market via:

- Licensing
- CRADAs – Cooperative Research and Development Agreements
- Other Partnership Agreements
- Facility Use
- Technical Assistance



Agencies and Research



Federal Technology Transfer, FY2016

Intellectual Property



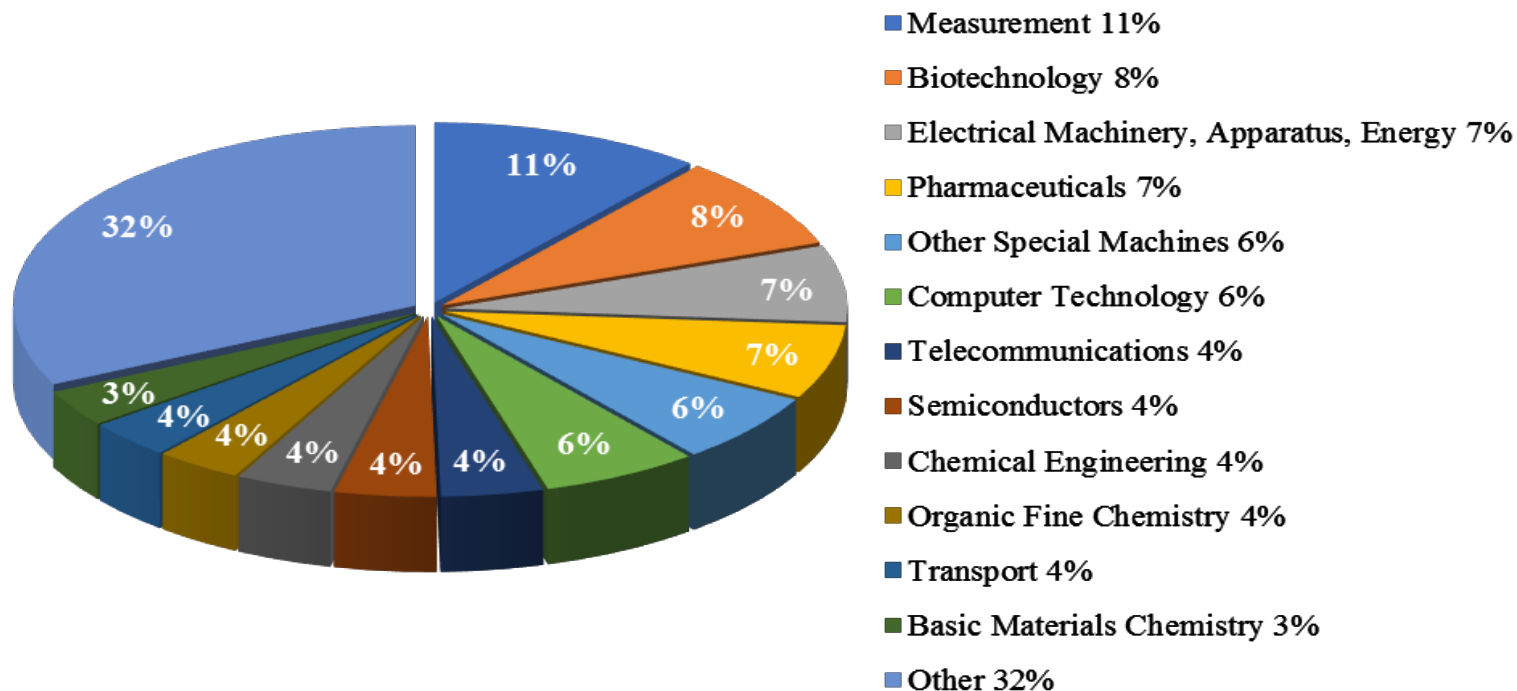
- Disclosures: ~ 5,000
- Issued patents: ~2,500
- Licenses: ~1,200 (10,000 Active)
- Income: ~\$200M

Partnership Agreements



- CRADAs ~ 5,000
(10,000 Active)
- Other ~20,000

Federal Lab U.S. Patents by Technology Area (FY2016)



Tech Transfer Success

Radiation-Resistant Bacteria Inspire USU-BMI Vaccine Against Polio and Emerging Superbug

Federal Labs: U.S. Department of Defense Uniformed Services University of the Health Sciences (USU), Henry M. Jackson Foundation (HJF)

Partner: Biological Mimetics Inc. (BMI)

A collaboration between USU and Biological Mimetics Inc. (BMI) resulted in joint intellectual property (IP) for a new polio vaccine, with a patent application with both USU and BMI inventors under prosecution management by BMI.



FLC 2021 National Award Winner - Excellence in Technology Transfer

Tech Transfer Success

NIST-TEDCO Entrepreneurship Program Facilitates 11 New Start-ups and \$2.7 Million in Annual Revenue

Federal Lab: National Institute of Standards and Technology (NIST)

Partner: Maryland Technology Development Corp. (TEDCO)

The NIST Science and Technology Entrepreneurship Program (N-STEP) is a joint effort by the NIST Technology Partnerships Office and TEDCO to facilitate new company formations by departing NIST employees and commercialization of NIST technologies, which, in turn, creates jobs.

***FLC 2021 National Award Winner – State and Local
Economic Development***



Tech Transfer Success

NIAID-facilitated Clinical Trial Speeds Availability of Remdesivir for Treatment of COVID-19 Patients

Federal Lab: National Institute of Allergy and Infectious Diseases (NIAID)

Partner: Gilead Sciences

NIAID's Technology Transfer and Intellectual Property Office negotiated a Clinical Trial Agreement (CTA) with Gilead to facilitate a clinical trial of remdesivir for treatment of COVID-19 - a trial that led to an emergency use authorization of the therapy less than three months later.



***FLC 2021 National Award Winner – Impact Award
with COVID-19 Response Distinction***



Tech Transfer Success

Memory Foam

Federal Lab: National Aeronautics and Space Administration (NASA)

Partner: Dynamic Systems, Inc.

Temper foam was developed to protect airline seating from vibrations and improve energy-absorption for increased survivability in the event of a crash. An open-cell polymeric “memory” foam material was developed with unusual viscoelastic properties for high-energy absorption and comfort.

The “temper foam” technology is used to produce a multitude of products, branded as Sun Mate Cushions, including the popular memory foam mattresses.



Tech Transfer Success

Holographic Millimeter Wave Scanning for Passengers

Federal Lab: Pacific Northwest National Laboratory (PNNL)

Partner: L-3 Security Detection Systems

PNNL developed holographic millimeter wave technology that is used to screen millions of passengers at airport security checkpoints nationwide.

This technology was licensed to L-3 Security Detection Systems to be the basis for a line of screening systems, which are now deployed worldwide.

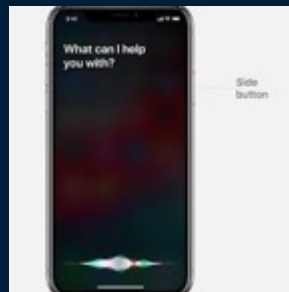
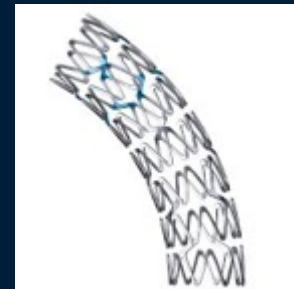
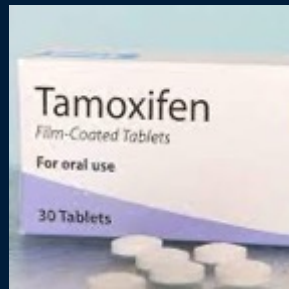
PNNL researchers developed this technology with funding from the Department of Defense, Department of Homeland Security and the Department of State.



Tech Transfer Success

Products on
the market
that originated
in federal labs:

For more, check out
www.federallabs.org



FLC's Mission



Promote awareness and foster dialogue about federal R&D and the significant economic benefits of tech transfer among government, industry, academia and other external partners.



Educate federal tech transfer professionals on commercialization best practice strategies through training opportunities and resources.



Facilitate federal laboratories' tech transfer goals via FLC-created tools and services that enable an accessible path for getting technologies from lab to market.

How Do We Carry Out Our Mission?

- We Promote, Educate and Facilitate technology transfer through our activities and resources.
- federallabs.org is the main platform to find all our resources, including:
 - **Awards**
 - **LabTech in Your Life**
 - **Labs in Action**
 - **The FLC Learning Center**
 - **FLC Business**



Promote: Communication and Recognition

- FLC Awards Publication and Gallery
- LabTech in Your Life
- Annual Report to the President and Congress
- Labs in Action (Success Stories)
- Social Media/Press Releases
- Newsletters/Events

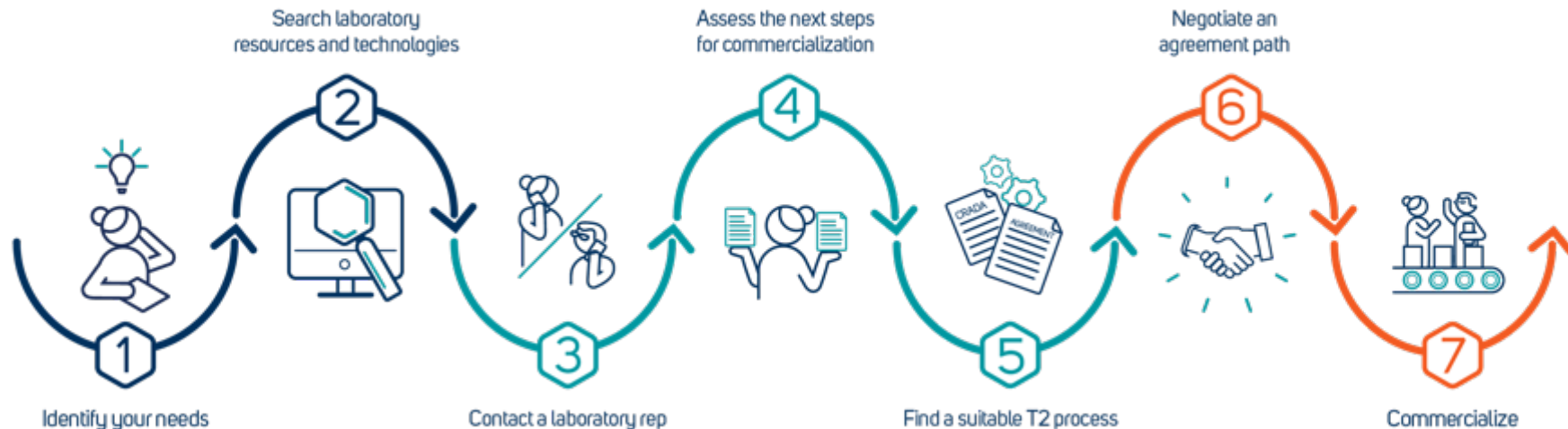


Educate: Technology Training

- National Meetings
- Regional Meetings
- Webinars
- Courses
- Reference Materials



Facilitate: Enhancing Partnerships



FLC Partnerships

The FLC is open to developing partnerships on national and regional levels to enhance public-private connections.

Examples of **National Partnerships**:

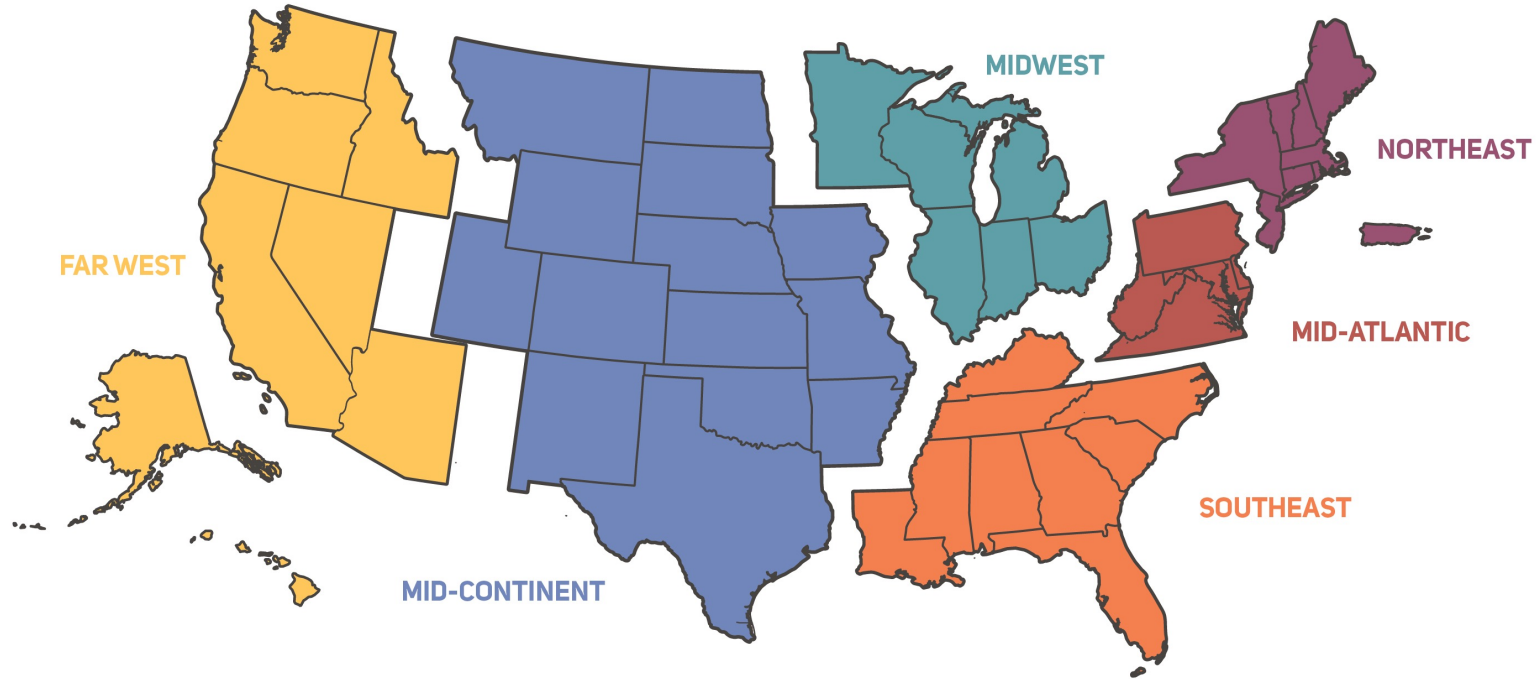
- Small Business Administration SBIR/STTR
- Minority Business Development Agency (MBDA)
- Association for Unmanned Vehicle Systems International (AUVSI)
- The Water Council

Examples of **Regional Partnerships**:

- New Jersey Commission on Science, Innovation and Technology
- Montgomery County Economic Development Corporation
- Maryland Technology Development Corporation
- CO-LABS



FLC Regions



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