

### Federal Laboratory Consortium for Technology Transfer

### 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.

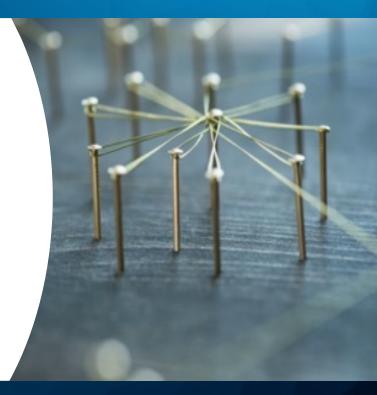




### How Federal Innovation Is Transferred

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

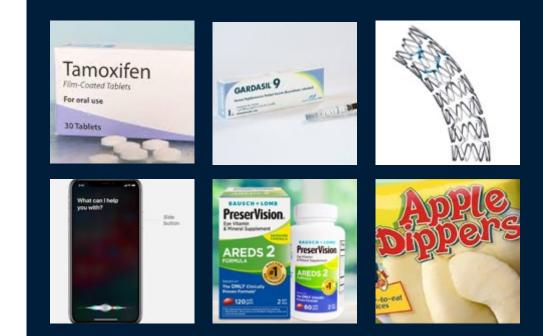
- Licensing
- CRADAs Cooperative Research and Development Agreements
- Other Partnership Agreements
- Facility Use
- Technical Assistance





### Products on the market that originated in federal labs:

For more, check out www.federallabs.org





#### 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



Uniformed Services University



Biological Mimetics, Inc. New Generation Antigens, Vaccines & Antibodies



#### 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

## NIST

National Institute of Standards and Technology

U.S. Department of Commerce





#### 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. NIH

National Institute of Allergy and Infectious Diseases

GILEAD Creating Possible

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



#### 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.





# 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.





### From Idea to Commercialization

