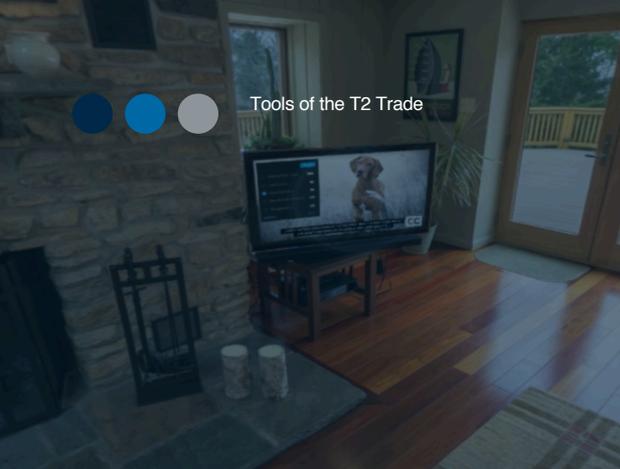




Business Services for T2 Professionals

Tools and services created to
facilitate federal technology transfer

MARC SNYDERMAN, ESQ.
FLC Program Director



Army-Funded Visual Effects Technology Wins Oscar

TOOLS OF THE T2 TRADE

PROMOTIONAL TOOLS

LabTech in Your Life

FLC Awards

FLC Communication

(i.e. FLC Digest, news, social media)

TOOLS TO FACILITATE T2 SUCCESS



FLC Business



Technology Locator



T2 Success Track



T2 Playbook



*The everyday places and spaces
where you find and interact with
federal technologies.*

LabTech in Your Life is a virtual experience that reveals the common technologies people use every day that were originally developed inside a federal lab and later introduced to the commercial marketplace.

LabTech at Home

The first virtual environment of LabTech in Your Life. Tour living spaces and discover federal innovations that have been further developed and introduced to the market as recognizable household items.

**Visit labtechinyourlife.com
to get started!**



LABTECH AT HOME

THE FIRST VIRTUAL ENVIRONMENT OF LABTECH IN YOUR LIFE.



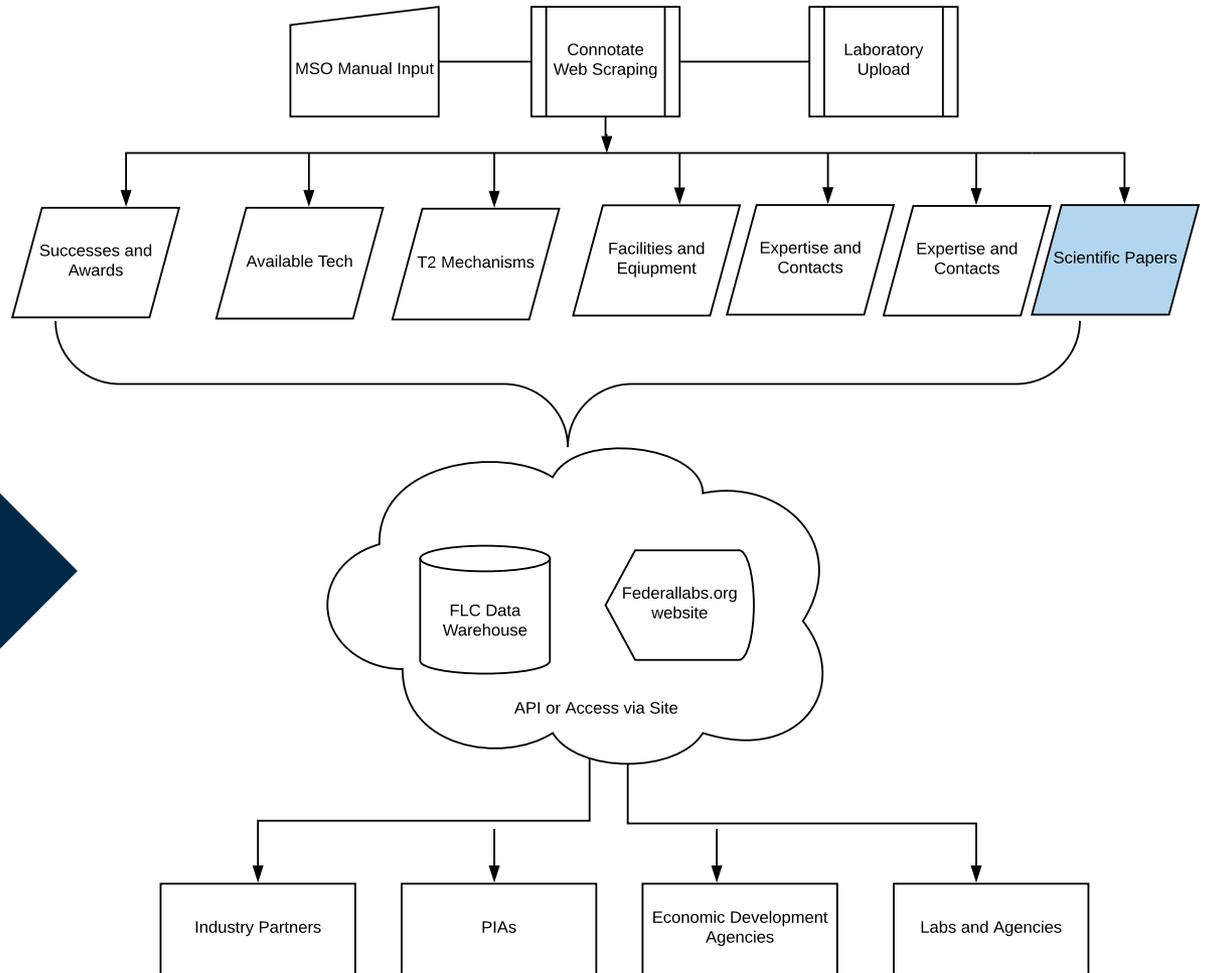
Six home living spaces featuring 27 successfully transferred federal techs that we use every day!

CURRENT AGENCIES AND NUMBER OF TECHNOLOGIES

- NASA - 3
- DoD - 4
- DOC - 4
- USDA - 9
- DOE - 4
- EPA - 1
- DHHS - 1



FLC DATA STRUCTURE





FLC BUSINESS

LAB RESOURCES



Available Techs - 13,822

Laboratories - 376

Facilities - 2,644

Equipment - 251

Publications/Reference
Materials - 47

Funding - 119

Programs - 109



FLC BUSINESS

FLC Business is a robust search engine and comprehensive federal laboratory resource database.



EASY-TO-FIND LABORATORY DATA

Federal Laboratories

Facilities

Available Technologies

Equipment

Lab Publications

Funding

Programs

The screenshot shows the FLC Business Search website interface. At the top, there is a search bar with the URL <https://www.federallabs.org/flcbusiness/search>. Below the search bar is the FLC logo and navigation links: ABOUT, SUCCESSES, LEARNING CENTER, T2 TOOLKIT. A search bar contains the text "Search FLC Business ...". Below the search bar are buttons for "SEARCH" and "RESET".

The main content area displays "Lab Categories" with a list of categories and their counts:

- LABORATORIES (327)
- FACILITY (2651)
- NON SECURITY LAB (13006)
- SECURITY LAB (4059)
- GOVERNMENT OWNED, CONTRACTOR OPERATED (4092)
- GOVERNMENT OWNED, GOVERNMENT OPERATED (1200)

Below the categories are "Resources" with a list of categories and their counts:

- AVAILABLE TECHNOLOGY (13655)
- EQUIPMENT (251)
- PUBLICATIONS & REFERENCE MATERIALS (49)
- FUNDING (118)
- PROGRAM (114)

On the right side, there are search results for "Reversible Computation Gate in Superconducting Circuit", "USGS Water Science Centers", "Stable Isotope Laboratory", "Luminescence Geochronology Lab", and "Tephrochronology Project Laboratory". Each result includes a brief description and a "Quick View" button.

HOW TO SEARCH FLC BUSINESS

A one-stop shop to search thousands of resources and technologies across the entire federal laboratory system.



Basic Search

Categories

Lab Directory View

U.S. Laboratory Directory

Search for labs alphabetically using the laboratory directory

- Benet Laboratories
- Boulder Laboratories (NIST)
- Brigham Young University (BYU)
- Brookhaven National Laboratory (BNL)
- Bureau of Reclamation (BR)



FLC Business

HOW TO SEARCH FLC BUSINESS

Advanced search offers the
ability to search by:

- Agency
- Technology Disciplines
- Lab Region
- State
- Owner
- Security
- Business Category

Type to Search... SEARCHING IN All Categories CLOSE FILTERS

LABORATORIES **FACILITIES** **EQUIPMENT** **TECHNOLOGY** **PUBLICATIONS** **FUNDING** **PROGRAMS**

Agency

- Dept. Of Agriculture (USDA) Dept. Of Commerce Dept. Of Defense Dept. Of Energy Dept. Of Health And Human Services
- Dept. Of Homeland Security Dept. Of Transportation Dept. Of Veterans Affairs Environmental Protection Agency NASA
- Dept. Of Interior National Science Foundation Dept. Of Labor

Tech Disciplines

- Aerospace Defense Education Materials Physical Sciences Medical-Health Electronics&Hardware IT-Software
- Manufacturing Energy Communications Security Marine Nuclear Environmental Life Sciences
- Transportation Weather

Lab Region

- Mid-Continent Far West Midwest Northeast Southeast Mid-Atlantic

State

- California Colorado District Of Columbia Florida Georgia Idaho Illinois Indiana Iowa Maryland
- Massachusetts Mississippi New Jersey New Mexico New York North Carolina Ohio Oklahoma
- Pennsylvania South Carolina Tennessee Texas Virginia Washington West Virginia Wisconsin Arizona
- Connecticut New Hampshire Alabama Alaska Arkansas Hawaii Kansas Louisiana Maine Michigan
- Minnesota Missouri Montana Nebraska Nevada North Dakota Oregon Rhode Island South Dakota
- Utah Wyoming

Owner

- Govt Owned, Contract Operated Govt Owned, Govt Operated

Security

- Non Security Lab Security Lab

Business Category

- Asian Pacific American Black American Hispanic American Historically Black College/University
- Minority Owned And Controlled Disadvantaged Business Small Business Service Disable Veteran Small Business

Submit **Clear**

HOW TO FIND AN AVAILABLE TECH

The screenshot shows the FLC Business Search interface. At the top, the URL is <https://www.federallabs.org/flcbusiness/search>. The navigation bar includes links for ABOUT, SUCCESSES, LEARNING CENTER, FLCBUSINESS, and T2 TOOLKIT, along with a search icon. Below the navigation bar, the search results are displayed for the query "titanium".

Categories (indicated by a red dashed line):

- LABORATORIES (0)
- FACILITY (6)
 - NON SECURITY LAB (27)
 - SECURITY LAB (28)
- GOVERNMENT OWNED, CONTRACTOR OPERATED (24)
- GOVERNMENT OWNED, GOVERNMENT OPERATED (4)

Resources (indicated by a red dashed line):

- AVAILABLE TECHNOLOGY (48)
- EQUIPMENT (1)
- FUNDING (0)
- PROGRAM (0)

Agencies (dropdown menu)

Regions (dropdown menu)

States (dropdown menu)

Tech Disciplines (dropdown menu)

Search Results:

Displaying 1 - 10 of 55

Search input: SEARCH RESET

Reset Searches

Stable Titanium Dioxide Nanoparticles for More Efficient Solar Cells and Environmental Decontamination IB-2686

Sam Mao and a team of scientists at Berkeley Lab have developed a titanium dioxide nanoparticle that absorbs energy over the entire solar spectrum. These photocatalysts can be used to efficiently convert solar radiation to fuel (hydrogen) and purify air and water containing contaminants. The...

Available Technology details Quick View

Lawrence Berkeley National Laboratory (LBNL)

AGENCY: Dept. of Energy [Lab Profile](#) [Tech Transfer Website](#)

REGION: Far West

STATE: California

LAB REPRESENTATIVES: Suzanne Storar
E: ststorar@lbl.gov
P: 510-486-4306
F:

Passivation of reactive gas atomized titanium aluminide powder

(DIV) Iowa State University and Ames Laboratory researchers have developed a process to control and retain halogen alloy additions to titanium aluminide powders in the form of a surface film. (DIV)

Available Technology details Quick View

Titanium-tantalum alloys

Available Technology details Quick View

Improved Martensitic Steel for High Temperature Applications

Research is active on the patented technology, titled "Heat-Treated 9 Cr-1 Mo Steel for High Temperature Application." This technology is available for licensing and/or further collaborative research from the U.S. Department of Energy's National Energy Technology Laboratory (NETL).

Available Technology details Quick View

Quick View (indicated by a red dashed line):

HOW TO FIND A FEDERAL LABORATORY

https://www.federallabs.org/flcbusiness/search

Brookhaven National Laboratory (BNL)



Agency/Department
Dept. of Energy

FLC Region
Northeast

Security Lab
Yes

Address
Bldg. 460
P.O. Box 5000
Upton, NY 11973-5000
United States

[Map it](#)

Laboratory Representative
P: 631-344-8941
F:

[Lab Profile](#)

TECH TRANSFER WEBSITE:

<http://www.bnl.gov/partner/>

- About
- Available Technologies
- Funding
- Programs
- Facilities
- Equipment
- Publications
- Awards
- News
- Success Stories

See outdated or incorrect information?

[Notify Us](#)

Description

One of ten national laboratories overseen and primarily funded by the Office of Science of the U.S. Department of Energy (DOE), Brookhaven National Laboratory conducts research in the physical, biomedical, and environmental sciences, as well as in energy technologies and national security. Brookhaven Lab also builds and operates major scientific facilities available to university, industry and government researchers. Established in 1947 on Long Island, Upton, N.Y., Brookhaven is a multi-program national laboratory operated by Brookhaven Science Associates for the U.S. Department of Energy (DOE). Six Nobel Prizes have been awarded for discoveries made at the Lab. Brookhaven has a staff of approximately 3,000 scientists, engineers, technicians and support staff and over 4,000 guest researchers annually. Brookhaven National Laboratory's role for the DOE is to produce excellent science and advanced technology with the cooperation, support, and appropriate involvement of our scientific and local communities.

Mission

The fundamental elements of the Laboratory's role in support of the four DOE strategic missions are the following:

- To conceive, design, construct, and operate complex, leading edge, user-oriented facilities in response to the needs of the DOE and the international community of users.
- To carry out basic and applied research in long-term, high-risk programs at the frontier of science.
- To develop advanced technologies that address national needs and to transfer them to other organizations and to the commercial sector.
- To disseminate technical knowledge, to educate new generations of scientists and engineers, to maintain technical capabilities in the nation's workforce, and to encourage scientific awareness in the general public.

Tech Areas

- [Tumor Biology and Metastasis](#)
- [Nuclear and high-energy physics](#)
- [Physics and chemistry of materials](#)
- [Environmental and energy research](#)
- [Nonproliferation](#)
- [Neurosciences and medical imaging](#)
- [Center for Functional](#)
- [Collider-Accelerator](#)
- [Energy Sciences &](#)

Categories

Chat now

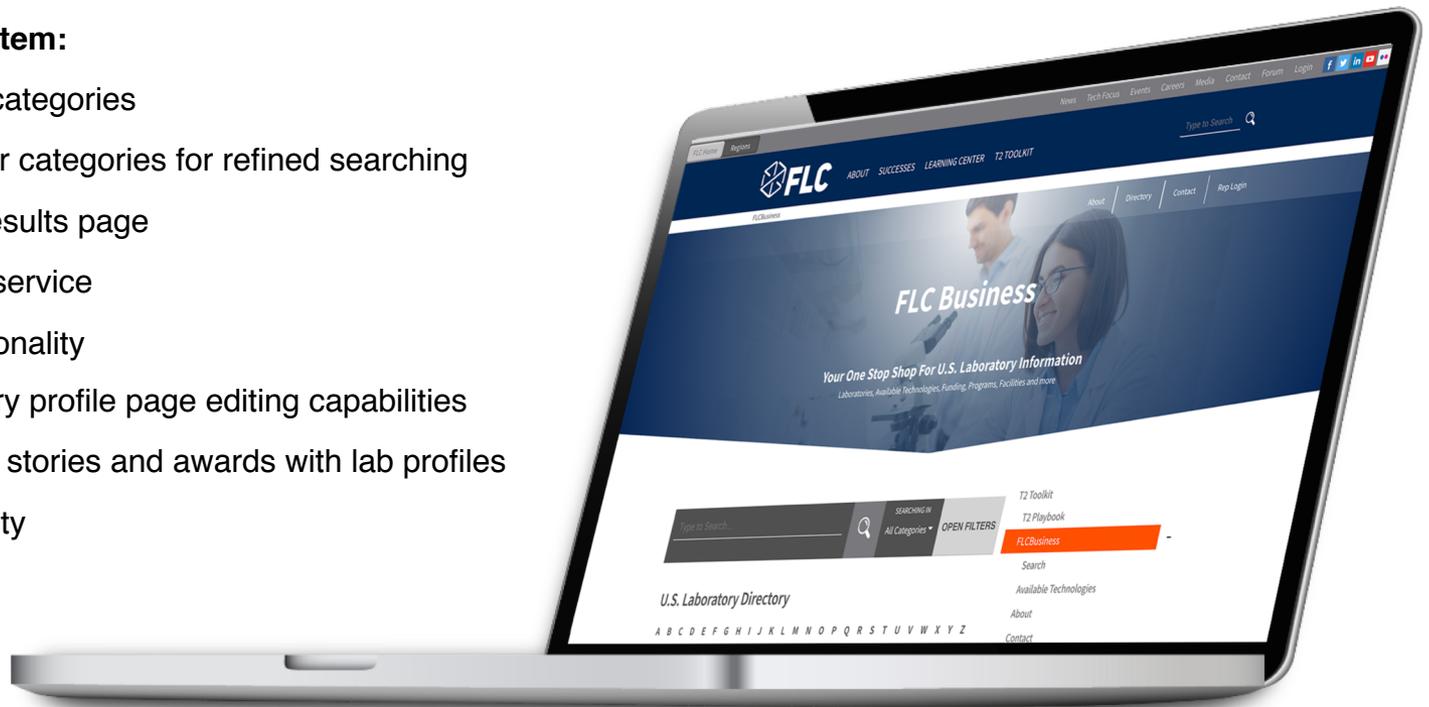


FLC BUSINESS UPDATES

FLC Business 3.0 is an upgraded version of the FLC Business search platform.

Upgrades to the system:

- Redefined search categories
- New advanced filter categories for refined searching
- Filterable search results page
- Tech Locator chat service
- Save search functionality
- Upgraded laboratory profile page editing capabilities
- Integrated success stories and awards with lab profiles
- Print/share capability





Tools of the T2 Trade

TECHNOLOGY LOCATOR

Technology Locator serves as a matchmaker between you and the FLC community's large network of laboratory resources.

https://www.federallabs.org/flcbusiness/search

FLC Home Regions News Tech Focus Events Careers Media

FLC ABOUT SUCCESSES LEARNING CENTER T2 TOOLKIT

T2 Toolkit Technology Locator Service

Technology Locator Service

How the Technology Locator Service Works

- 1 REQUEST**
- 2 SEARCH**
- 3 INTERACTION**
- 4 INTRODUCTION**

assistance and representatives with

T2 Toolkit

T2 Playbook

FLCBusiness

Available Technologies

Technology Locator Service

Request Form

T2 Mechanisms

requests submitted



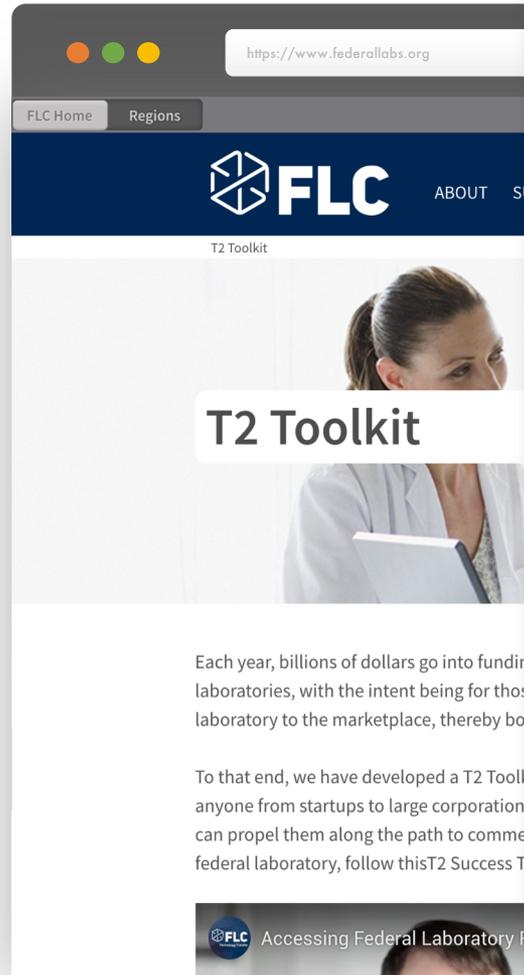
Tools of the T2 Trade

T2 SUCCESS TRACK

FEDERALLABS.ORG:

A visual success track of 7 steps for innovators to follow when navigating the T2 process.

<https://www.federallabs.org/t2-toolkit>



STEP 1: Identify your R&D needs

Do you have an idea, invention, or product you'd like to further develop? Our federal laboratories have a wealth of facilities, equipment, expertise, and technologies available for licensing that you can utilize to create business solutions and introduce your new technologies to the marketplace. Determine what you need and search the Toolkit databases.



STEP 2: Search laboratory resources and technologies

When you know the type of assistance you need, search our tools: **FLC Business** is our comprehensive laboratory resource database, and **Available Technologies** is an extensive listing of federal technologies that are available for licensing. Or if you still need further assistance, our **Technology Locator** can steer you in the right direction with one-on-one guidance.



STEP 3: Find a suitable T2 process

After you've found the laboratory, facility, equipment, and/or laboratory program you'd like to access or utilize, there are several processes or ways in which to move forward depending on the type of collaboration you're hoping to enter into, such as usage and/or licensing options. Get started on finding the right process for you by searching our extensive **T2 Mechanisms database**.



STEP 4: Assess the next steps for commercialization

Since there are several types of agreement options available and more than one that may be suitable for your R&D need(s), it is best at this stage in the process to assess each sample agreement available and determine what information you'll need to disclose before reaching out to a laboratory representative and moving forward in the T2 process.



STEP 5: Contact a laboratory representative

Now that you've determined your ideal commercialization path, it's time to reach out to the lab. To do so, you can search by laboratory profile in **FLC Business** or contact the **Technology Locator** to help you find the pertinent contact information. The laboratory representative will help you determine the best route for accessing the lab, facility, equipment or expertise you wish to utilize.



STEP 6: Negotiate an agreement path

It's time to initiate, negotiate, and complete an agreement between you and the federal laboratories. Given the mechanism path that was agreed upon, this stage in the process can take some time to complete so both the laboratory and the private-sector parties can achieve what they hoped to gain from the initiated agreement. The agreement will take into account all of the complex factors both parties involved need to consider during negotiations, such as the developmental stage of the technology, additional partners, risk vs. potential return on investment, among others. These factors are worth the time and consideration so the agreement is advantageous for everyone.



STEP 7: Commercialize!

You've reached the end of the transfer process, and it's now time to commercialize! You're now on the path to access technology and facilities never before utilized. The T2 office will follow up to ensure quality control, resolve any issues that may arise, and introduce potential third-party partners for sublicensing or joint development, among other administrative procedures.

Careers Media

Type

it

ebook

business

ble Technologies

ology Locator Service

mechanisms



T2 PLAYBOOK

View and download case studies of successful tech transfer “plays” and strategies that have helped seasoned T2 professionals through various agreements and business deals.

The screenshot shows a web browser window with the URL <https://www.federallabs.org>. The page title is "T2 Playbook". The main content area is titled "Technology Transfer Playbook".

Play 2
Encourage entrepreneurship internally by utilizing re-hire authorities
 As great as it is to work in our labs, there are some people that would consider giving entrepreneurship a try, but it can be hard to make the jump to the private side without a parachute. Ethics rules, tenure, and other factors often discourage federal workers from trying to make a go with new ideas. But federal employment rules are more flexible than many people imagine and every federal employee has reinstatement rights. While formal leave programs will have to carefully evaluate ethics issues in order to be successful, all agencies have the authority to rehire eligible individuals without having to post a vacancy announcement (5 CFR 315.401) if a position is relevant to the agency's mission and former federal employee's skills. This authority can be used to encourage current federal employees who have entrepreneurial interests to attempt to spin out a technology or start a business of their own. There is no time limit on re-employment for employees with veterans' preference or career tenure (3 years of continuous federal service); all other federal employees have a three year period of eligibility for reinstatement from the date they left federal employment. Additionally, some agencies have specific Direct Hire Authorities and Sabbatical Programs that can be used to encourage entrepreneurial efforts for current federal employees.

Play Details

- Encourage entrepreneurially minded employees to have a good rapport with their management and don't burn bridges - they will need to want the employee back for this to work!
- Encourage employees to stay in contact with management after their separation, they may be eager to have the employee back with a new experience
- Federal career employees with more than 3 years of creditable service have a LIFETIME eligibility for reinstatement.
 - Career employees can apply and be rehired as a government employee
 - Career employees can be included on a non-competitive certificate for rehire

Play 1 – Understand what all the players need
 We must begin by understanding and measuring the goals, tasks and needs of each person that we engage with during the course of business. This should include other agencies, laboratories, scientists, researchers, executives, analysts, policy makers and collaborators of all types. Our efforts support research and development and agency programmatic objectives both internally and externally, and we must ensure that we fully understand our customers. Our support of our agency and its researchers often facilitates new discoveries, inventions, or ideas that lead to innovation and attract collaborators or commercial partners. Our efforts also help our agency achieve its objectives. An understanding of the needs of potential collaborators or commercial partners is important to establishing fruitful relationships. Facilitating projects that address the needs of the agency, the public (including both the academic and business sectors), and the people, as well as consideration of the unique details of the science itself, should drive technical and contractual decisions. The staff of each federal Lab's technology transfer office play a central role in identifying these needs and aligning the mission-related priorities of their agencies' researchers and outside stakeholders.

Play Details

- The tech transfer staff must work closely with their lab director and with headquarters offices that are responsible for research and development to establish an overall strategy for technology transfer.
 - Developing a plan to incorporate tech transfer strategies early in the research process is critical to fully meet both the technical needs of the project and the downstream needs of the outside parties who could take the project to a commercial end.
 - Wherever possible, incorporate your stakeholders' input – both internal researchers and external partners.
- Understand the priorities within the technology transfer strategy (e.g., intellectual property (IP) protection and income, strategic partnerships, prizes/challenges) to better focus the program.
 - Recognize that priorities may change as missions evolve – it will be important to get feedback from the researchers who are working on the project, as well as the tech transfer and licensing staff.
 - Recognize and understand pushing and pulling markets and their effects on tech transfer – this will affect how you evaluate potential stakeholders and their needs.

Agency Examples
 The United States Department of Agriculture's (USDA) Agricultural Research Service (ARS) Tech Transfer Strategic Plan and Tactical Plan Approach include efforts to increase the effectiveness of tech transfer and the research impact of ARS. This included the formation of a cross-functional group

Table of Contents
 1. Understand

Download

FLC T2 Playbook | 3

FLC NATIONAL MEETING

JOIN US APRIL 23 - 25, 2019
IN ORLANDO, FL

meeting.federallabs.org

Valuable T2 professional training from subject-matter experts

- Continuing education credits (CEUs)
- T2 best practice strategy sessions
- Networking opportunities
- FLC awards reception and dinner
- Science and technology policy insights.



CONNECT WITH US!

support@federallabs.org

      | federallabs.org





QUESTIONS

Please submit any questions in the Q&A box.

JOHN DEMENT

FLC Chair

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MARC SNYDERMAN, ESQ.

FLC Program Director

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 msnyderman@utrs.com

Thank you for attending!