

FOSTERING COLLABORATION AMONG OUR NATION'S FEDERAL LABS, INDUSTRY, AND RESEARCH ORIENTED UNIVERSITIES



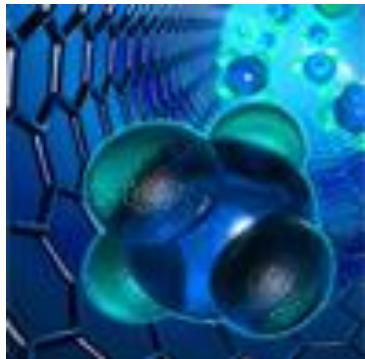
“The key to our success – as it has always been – will be to compete by developing new products, by generating new industries, by maintaining our role as the world’s engine of scientific discovery and technological innovation.

It’s absolutely essential to our future.”

– President Barack Obama, November 17, 2010

CENTER FOR

Innovation™



*“Technology based economic development
through open innovation”*

A Catalyst for the Innovation Economy

“The Center for Innovation”

- Established 2002
- Non Profit LLC
- Global, national, regional and local in scope
- Fostering collaboration among industry, academia, economic development, venture capital and government

Center For Innovation's Strategic Goals

- Create access to deal flow, fostering technology discovery, transfer and commercialization
- Create access to capital, through proof of concept, product and market
- Develop and identify talent and know how, through entrepreneurial development and start-up assistance

CFI'S Federal Agency Network

*“Building A New Model for
Transfer of Federal Technologies
to the Marketplace”*

Partnership Intermediary Authority

- Congressional authorization grants federal agencies the authority to contract with non-profits as “partner intermediaries” to facilitate tech transfer
- The purpose of the Domestic Technology Transfer Program is to facilitate the transfer of federal technologies to U.S. businesses for their research, development and production to meet federal requirements as well as commercial applications
- Technology transfer simultaneously enhances the economic competitiveness of U.S. industry and provides the federal agency with products that meet their needs

Premise

Our Federal Agency Network, established in 2010, is premised on the belief that our future economic sustainability is dependent upon our ability to foster collaboration among and between our nation's federal labs with (1) business and industry, (2) research oriented universities, (3) technology based economic development entities, (4) the venture capital industry, and (5) local governmental entities.

CFI Federal Agency Network Represents 11 Federal Agencies

- Defense (120 labs)
- Agriculture (90 labs & research centers)
- Homeland Security (1 lab and 8 research centers)
- HHS/National Institutes of Health (27 institutes)
- Energy (17 labs)
- Environmental Protection Agency (7 labs)
- Department of Interior (64 labs)
- Patent Trademark Office (Inventor Assistance Office)
- Small Business Administration
- Commerce/International Trade Administration
- NASA (10 Research Centers)

CFI Network Intermediary Process

DoD USDA DHS NIH DoE* Dol* EPA* USPTO SBA EPA* NASA



* Pending

Cooperative Research and Development Agreements, Patent License Agreements, Material Transfer Agreements, Testing and Facilities Use



Universities

EDOs

Industry

Angels, VCs

NIST MEPs

CFI Represent Access To A Significant Resource

- 344 labs
- \$140 billion spent annually on research
- 120,000 scientists/researchers
- 150,000 patented technologies

CFI Affiliate Partner Network

**“Linking business, industry, and
academia with our federal agency
partners.”**

CFI Affiliate Partner Network

Vision – to provide an international network of affiliate partners with each partner serving as a conduit to a greater number of local and regional entities, including venture funds and research institutions

Structure – selection of affiliate partners at state, regional, and local levels

- Business and Industry
- Universities
- Economic development organizations
- Municipalities & Airports

Affiliate Partner Priorities

- **Patent License Agreements:** we identify federal patented technologies that can be licensed for commercial use, manufacture, or production. We work as the association/ organizations “back office” to conduct the patent search with the federal labs; once a patent is identified, we assist throughout the patent license application process, through the conclusion of the licensing agreement.
- **Cooperative Research & Development Agreements:** We identify federal research priorities aligned with the research priorities of our Affiliate Partners as the basis for joint research agreement.
- **Federal Procurement Opportunities:** we identify patented technologies of our affiliates that would meet the needs of our federal agency partners; we assist the company with the federal procurement process, if alignment and interest is found.

CFI Facilitates Partnerships Through:

- Patent License Agreements (PLAs)
- Cooperative Research & Development Agreements (CRADA's)
- Trust Fund Cooperative Agreements (TFCA)
- Reimbursable Cooperative Agreements (RCA)
- Non-Assistance Cooperative Agreements (NCA)
- Agreements with other Federal Agencies (Interagency Agreements)
- Educational Partnership Agreements (EPA)
- Enhanced Use Lease Authority (EUL)
- Space Act Agreements (SAA)

Example: Precision Agriculture Demonstration Project

Partners:

- Georgia Blueberry Growers
- IBM
- University of Georgia
- Industry Partners

Premise: Demonstrate ability to forecast weather 72 hours in advance within 1 square mile.

Beta Lab Network

**“Guiding the development of
our model.”**

“Beta Lab Network”

- Network of 14 federal labs working with CFI
- Beta Labs guide development of model from lab perspective
- Beta Labs serve as focal point for technology transfer, regional forums and regional economic development

Beta Lab Focus

- Interagency Network Integration
- Patent License Agreements
- Cooperative Research Agreements
- Procurement Agreements

Beta Lab Areas of Interest

- Bio-Economy (USDA)
- Alternative Energy (DOE)
- Water Resources (DOI)
- Healthcare and Medical (DoD/NIH)
- Food Security (USDA)
- Cybersecurity (DHS)
- Unmanned Autonomous Systems
(DoD/USDA/DHS)

Example: UAS Consortium

Primary focus – develop the UAS Industry,
from concept/design/prototype development
to experimental
flight/production/manufacture

Premise and Rationale

- CFI's rationale for establishing a UVS consortium is based on our partnership agreements to represent the U.S. Departments of Agriculture, Defense, and Homeland Security as a Federal Partnership Intermediary, as all three are keenly interested in UVS.
- Currently, the Department of Defense spends \$2B with \$4.6 B annual projection.
- U.S. Department of Agriculture is developing for broad agricultural uses.
- U.S. Department of Homeland Security (DHS), agencies and the nations' first responder community are testing, developing, and deploying
- Federal Aviation Administration (FAA) is working to respond to a Congressional mandate to integrate UAV's into commercial airspace by September 2015.

Consortium Strategic Objectives

(Technical Guidance Committees)

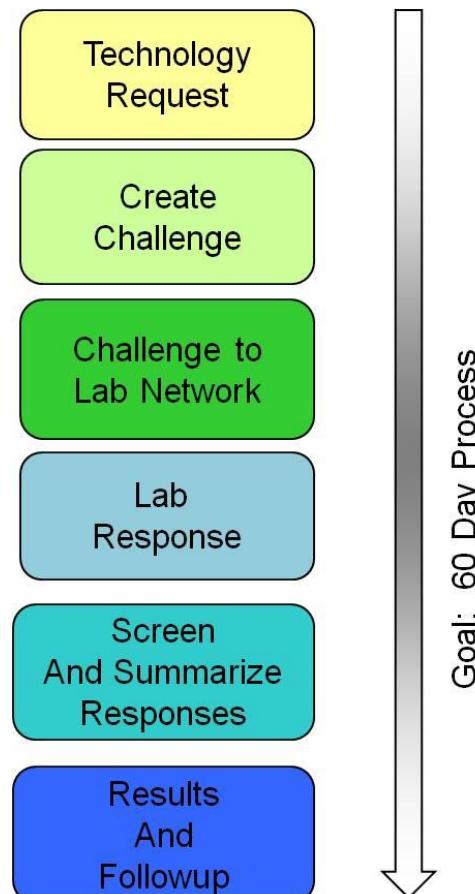
- Research, development, and commercialization
- Industry sector development
- Access to capital
- Education, workforce development, and training
- Development of policy and standards

Example: CFI Technology Challenge

- Our **Technology Challenge** matches industry needs for new products with technologies in the portfolios of our Innovation Network, which includes federal labs and universities.
- The program is based on the concept that “technology pull” can be an effective and efficient way to achieve license and collaboration efforts.

CFI Technology Challenge

6 Step process to identify industry needs:



CFI Technology Challenge

- ***Requestors*** are CFI Affiliates seeking new technologies or innovations to supplement their portfolio of new products or services.
- ***Responders*** come from our Innovation Network, which includes federal labs, universities, and corporate research facilities.

TechMatch

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“Connecting the Network”

Connecting The Network: The “Portal” Connection

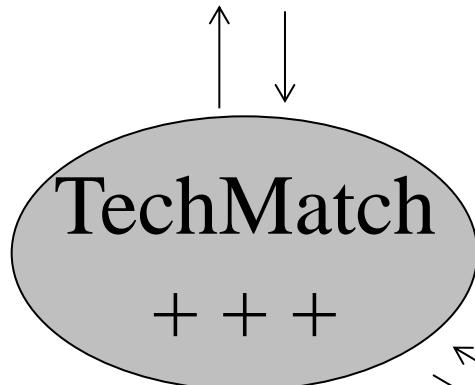
Federal Agencies/Labs

Inputs:

- Patent Portfolios
- Research Priorities
- Procurement Priorities

Outputs:

- CRADA proposals
- Licensing partners
- Procurement Opportunities



Industry

Inputs:

- Capacity
- Patent Portfolios
- Technology gaps

Outputs:

- PLA's
- CRADAs

Industry/Academic Partnerships

University

Inputs:

- Centers of Excellence
- Patent Portfolios
- Research Portfolios

Outputs:

- CRADA proposals
- Industry Research Partners

USPTO

Pro Bono Assistance Program

CFI manages the
Texas Office for the
USPTO Pro Bono
Inventors Assistance
Program under
America Invents Act



International Agency Partners

- International Trade Administration
U.S. Department of Commerce
- Foreign Agricultural Services
U.S. Department of Agriculture

International Affiliate Partners

Africa

- BASIX - East Africa
- Innovative Technology Transfer Center for Africa - Kenya
- Gauteng Province – South Africa

India

- Federation of Indian Chambers of Commerce and Industry
- Defence Research and Development Organisation - DRDO - India

VenComm

CFI's for profit venture commercialization arm

VenComm

- VenComm is a “for profit” LLC affiliate of the Center for Innovation
- Serves as a holding corporation for CFI projects
- Enables incubation of for profit corporate entities
- Enables the effective use and integration of public and private sector capital
- MOU with SBA

Testimonials

Svetlana Dimovski, Ph.D. – BASF

- BASF strongly supports CFI's efforts to create **open innovation** collaboration opportunities between industry and the federal labs. CFI helps industry understand the value of working with the **federal labs** and facilitates interaction with the appropriate federal contacts. Finding the right technology, innovator or contact became much easier with TechComm.



The Chemical Company

“Our challenge is to understand
the difference between
accomplishment and impact”

Dr. Michael Postek
National Institute of Standards and Technology

Questions?

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