The Only Government-wide Forum for Technology Transfer

J. Susan Sprake
FLC Vice Chair

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The Only Government-wide Forum for Technology Transfer

Innovation technology for companies can be found in the federal laboratories

Cutting edge research is done in these laboratories.

The FLC is a vast network of over 700 federal laboratories across the United States.

NASA, Department of Energy, National Institute of Health, Department of Agriculture, Department of Transportation, Department of Defense, etc…

FEDERAL LABORATORY CONSORTIUM

FLC

FOR TECHNOLOGY TRANSFER

The FLC was formally chartered by the Federal Technology Transfer Act of 1986 to promote and strengthen technology transfer nationwide.

Funded each year from a portion of federal R&D appropriations

The Only Government-wide Forum for Technology Transfer

The FLC Structure

The Only Government-wide Forum for Technology Transfer

Executive Board (23 members)

- Chair
- Vice Chair
- Regional Coordinators (6)
- Laboratory Representatives
- National Advisors (Industry and Gov.)
- Washington DC rep

FEDERAL LABORATORY CONSORTIUM
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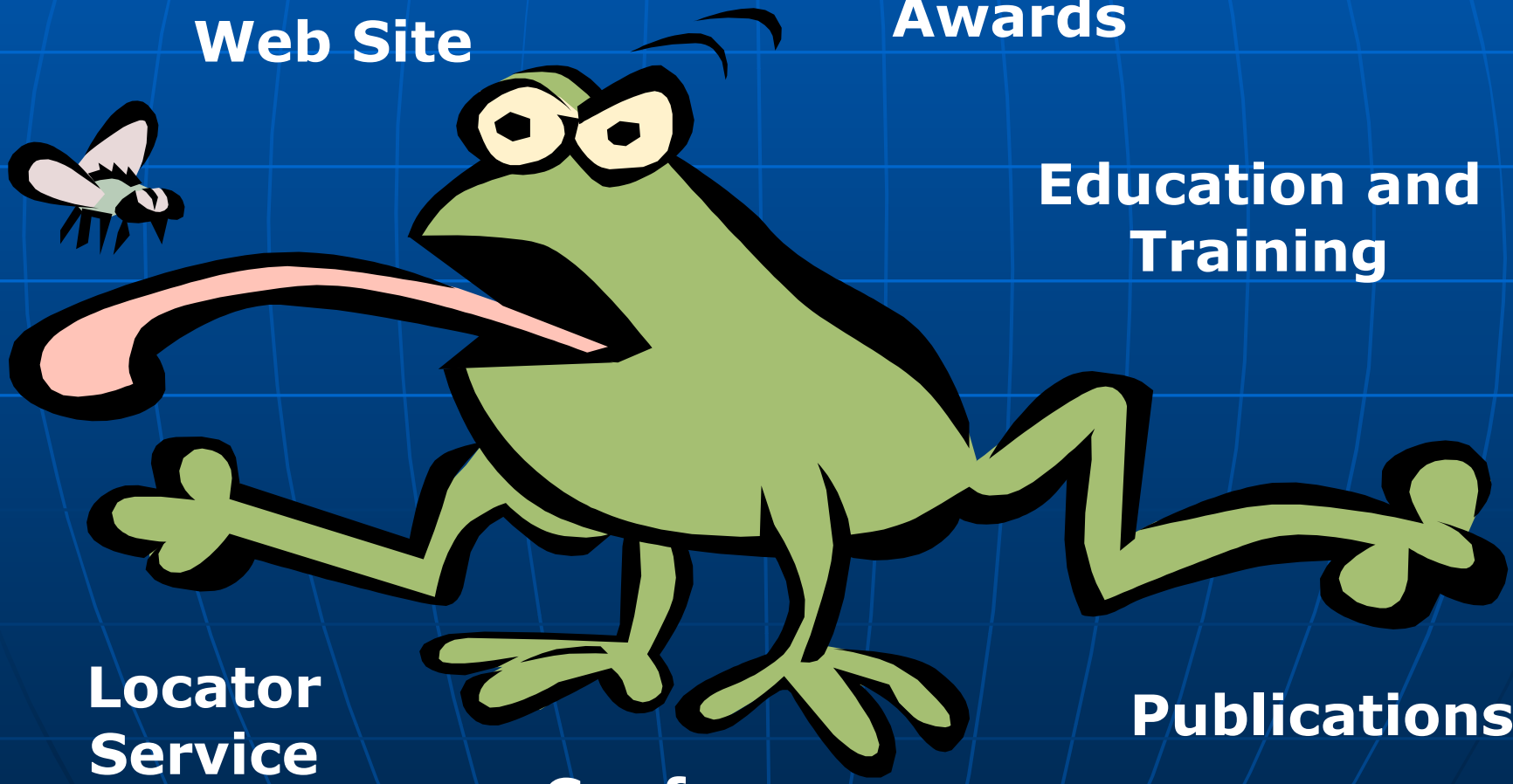
FLC Regions

Promoting the Technology and Technology Transfer Tools

Internet Web Site

Awards



Education and Training

Locator Service

Publications

Conferences

Committees

- Education and Training
- Communications and Publications
- Awards
- State & Local Government
- Policy & Planning
- Program

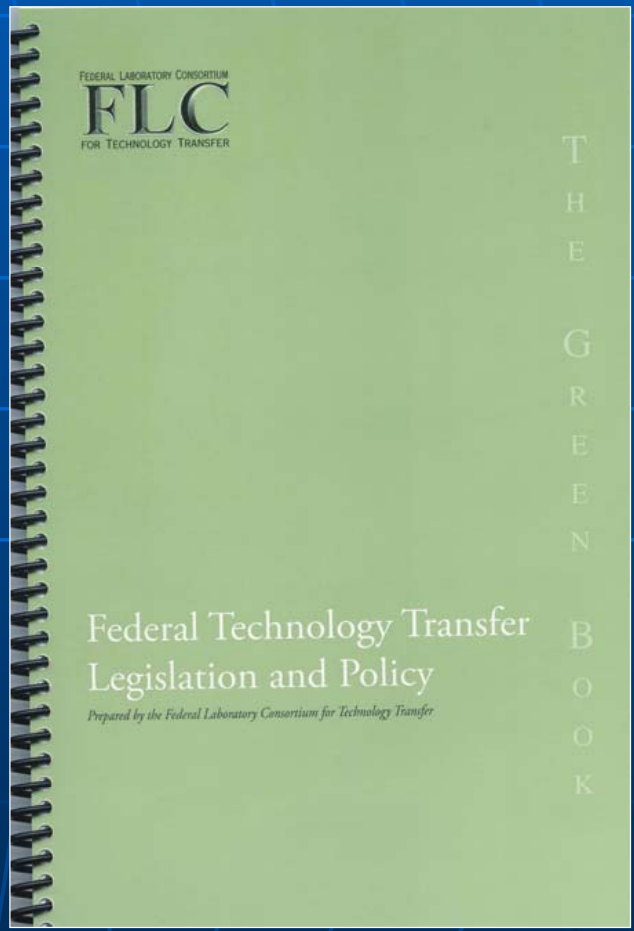
Training the Professional

The FLC is committed to providing technology transfer professionals, researchers, and members of industry with the tools and services needed to further professional development.

- ***Federal Technology Transfer Legislation and Policy***

"The Green Book,"

- Provides the principal statutory and presidential executive order policies that constitute the framework of the federal technology transfer program.
- It is also intended to help those outside the government acquire a fundamental understanding of the legal framework for technology transfer



FLC Technology Transfer Desk Reference

The Desk Reference includes:

technology transfer overview, including technology transfer procedures, history, strategies, organizations, and mechanisms; the role of the FLC in technology transfer; Cooperative Research and Development Agreements (CRADAs); and intellectual property issues.

Intermediate Classes

Use of different Mechanisms to transfer technology*

Exchange of Best Practices

Challenges & Problems discussion.

- Review of new technologies for commercialization potential
- Marketing research
- Marketing the technology

*Technology Transfer Mechanisms

- Patent License Agreement
- Cooperative Research and Development Agreement (CRADA)
- Work for Others – Work for Private Parties
- Collegial exchange
- Educational Partnership Agreement
- Use of Facilities Agreement
- Commercial Test Agreement
- Material Transfer Agreement
- Partnership Intermediary Agreement
- Commercial Service Agreement
- Personnel Exchange

Examples are on the Web Site

Advanced Classes

Intellectual Property Assessment

Advanced Licensing Negotiations

Different types of Licenses

Differences between industry expectation and Federal laboratory requirements.

Alliance Building Workshops / Partnerships*

TECHNOLOGY TRANSFER

PUT INDUSTRY on your team

PARTNER

P&G

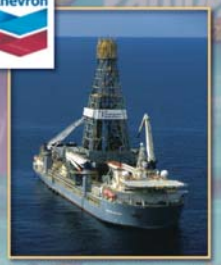
LANL Technology Saves Procter & Gamble More Than $1 Billion in Manufacturing Costs

The partnership between LANL's Statistical Sciences group (D-1) and P&G to improve manufacturing reliability achieved significant savings for P&G in its worldwide manufacturing operations. The project also gave LANL a wealth of real-time data for quantifying complex phenomena critical to our stockpile stewardship mission.

This solution is the single most powerful driver for reducing costs across all aspects of manufacturing that I have found in over 25 years of experience at P&G.

— Mary Anne Gale, vice president of global supply chain operations for P&G

Chevron



Los Alamos Discovery Can Prevent Catastrophic Failure in Deep Sea Wells, Saving $100 Million

Chevron and Los Alamos have cooperated in a variety of projects, including Radio Frequency Telemetry and Sensor Technology for collection and transmission of oil well data and acoustic interferometry and are now entering into a strategic alliance for increasing cooperation.

— Donald Paul, vice president and chief technology officer at Chevron

3M

MOTOROLA

Neocera

If you have a project or innovation that has commercial potential, working with an industrial partner to commercialize your technology can provide great benefit to your team and your division. Some of the most innovative work being performed at the Laboratory today is collaborative research with industrial partners seeking solutions to challenging problems. Industry brings its problems and data. We give industry innovative solutions and use their data to test our concepts—a highly synergistic relationship.

Partnering with industry has provided positive benefits for the Laboratory:

- Strengthening of Laboratory programs and technical reputation
- Additional research $$$ to solve real world problems with our expertise
- License and royalty $$$ for innovators and their divisions from Los Alamos-licensed technologies

We can help you develop a partnership:
www.lanl.partnerships

NNSA

Los Alamos NATIONAL LABORATORY

PARTNER

Manufacturing Costs

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Some of the most notable relationships between federal laboratories and industry are their "Partnerships."

What would a baby diaper manufacturer have in common with a Federal lab?

- Proctor & Gamble asked around for help with its diaper production line. They were sent to one of the world's most preeminent laboratories, Los Alamos National Laboratory.

- PowerFactoRE – predict, prevent and reduce reliability losses, equipment failures, and time of repairs.

Proctor & Gamble
Los Alamos National Laboratory

- $1 billion dollars in operating cost – saved!

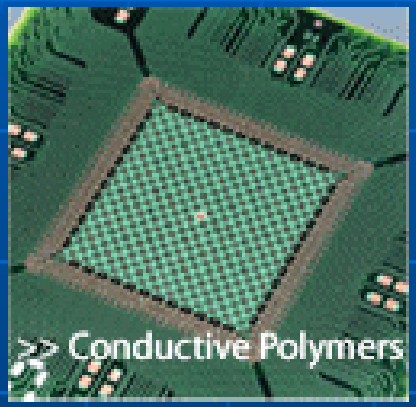
Los Alamos Technology:
Invented Here, Tested Here…
Transferred to Industry

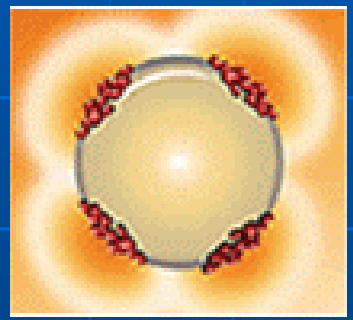
New Technologies

- Conducting Polymers
- The world of NANO
- Second sight
- Communications
- Batteries
- Sensors

Conducting Polymers

- Build artificial muscles



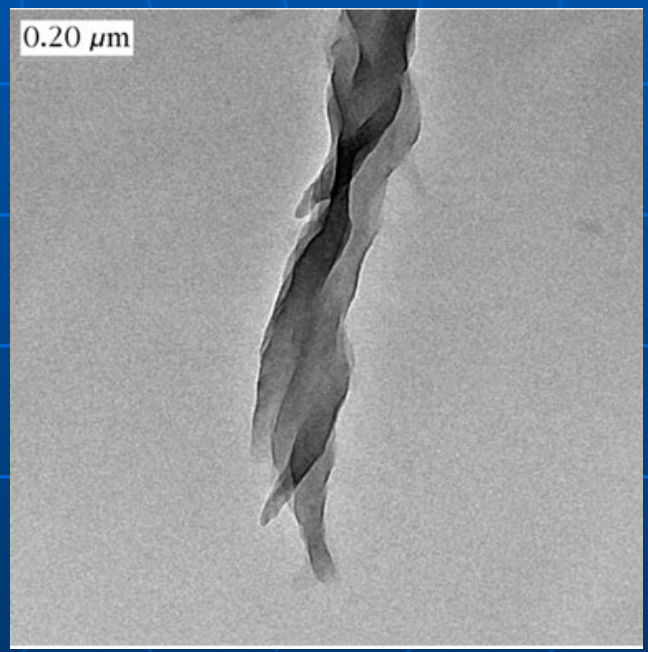


- Carbon Composite Implants

Light weight / very strong – bond with tissue

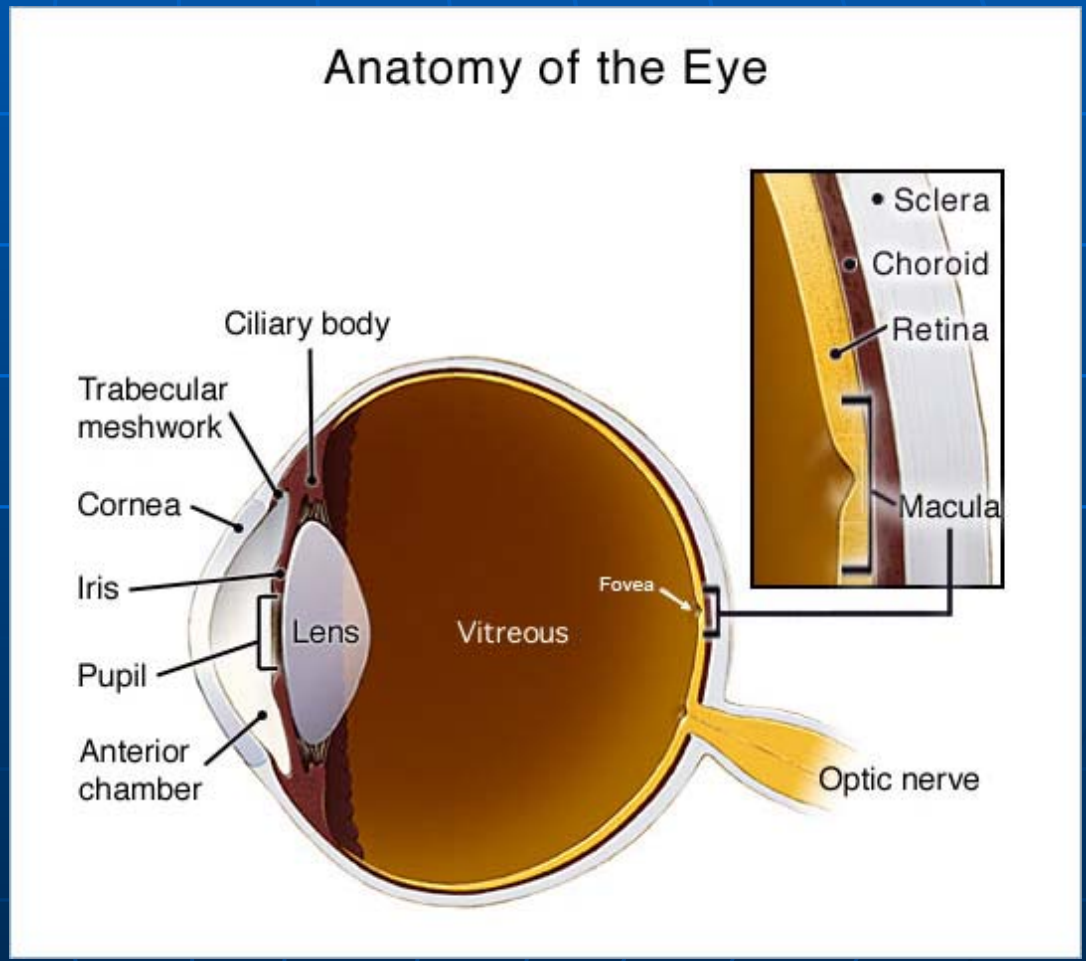
The world of NANO

- Repair Molecules
  - Nano – fibers technologies (bio & non-bio)
  - Bone replacement



Second Sight – restoring sight to millions

The goal is to develop a micro-electronic device that consists of a multiple artificial retinal chip set and implant it in the eye to allow patients to see images.



INFICOMM,* Two-Way Communication by *reflecting* Radio Waves

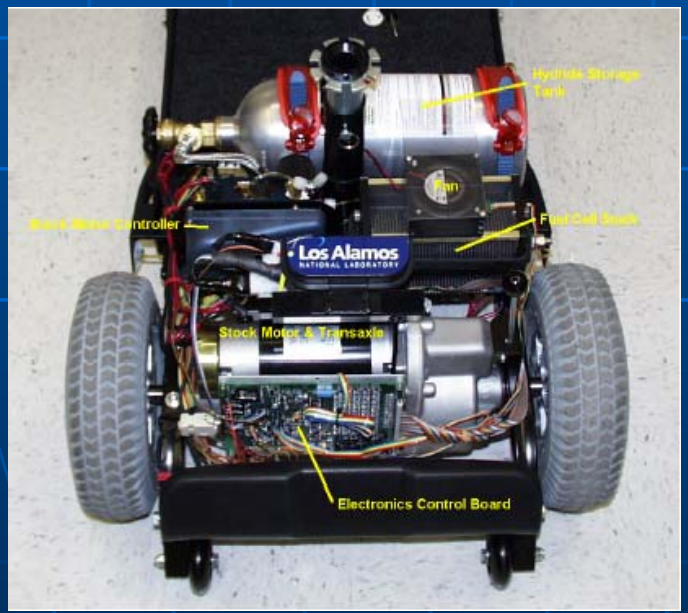
***For "Infinite Communication"**

- Totally passive technology useful for…
  - Safety—person locator - emergency needs

- Advantages of INFICOMM
  - No batteries required!
  - 3-mile radius for single antenna

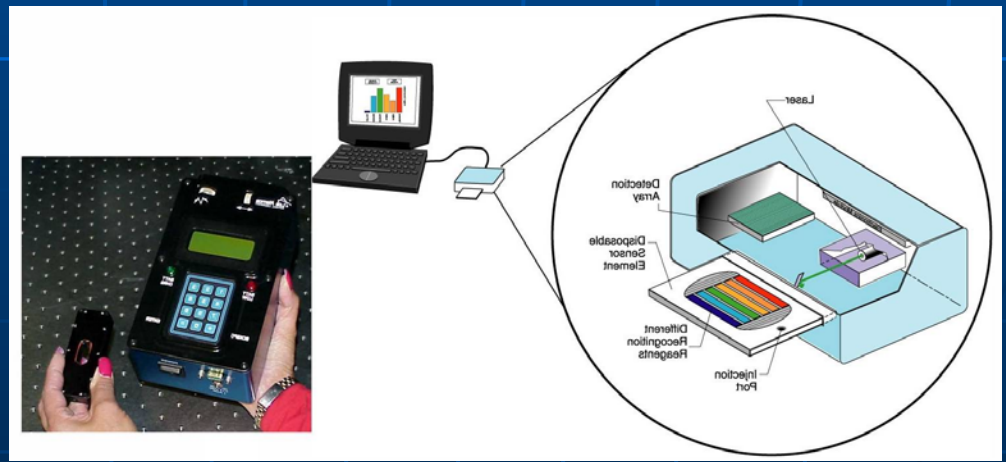
Hydrogen Fuel Cell

- Fuel Cells that power mobility units
- Scooters.
- Other Battery technology



New Technologies - Sensors

- Telemedicine
- Sensors
  - Smart skin sensors
- Home diagnostics
  - DNA dipstick - Flu
- Bio-Sensors
  - Bacterial
  - TB
  - Toxins
  - Tumors



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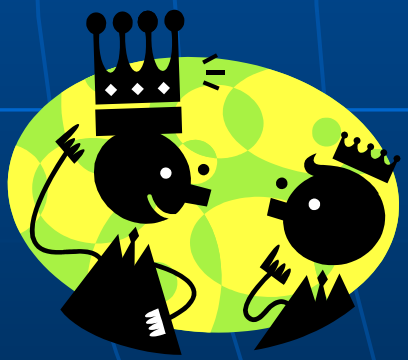
Intellectual Property
The Crown Jewels



Intellectual property can be a real delicate issue for some companies.

The FLC has subject matter experts that can help an entity understand how Intellectual Property can be protected as they consider and enter into a federal technology transfer partnership.

COMMUNICATIONS & PUBLICATIONS

- *FLC NewsLink* — Monthly newsletter
- Technology Calendar
- Technology Locator —potential partners find federal resources
- *Technology Transfer 2006* — Focused Technologies & Partnerships
- Educational Materials
- Exhibits — Major trade shows and conferences
- Media Support — Publications, brochures, etc.

Web site: www.federallabs.org

Technology Transfer Publications

Excellence in Technology Transfer Awards, 2006

Federal Technology Transfer Success Stories, 2006

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Technology Locator Service

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The FLC helps to find the right lab with the right technology for specific requirements.

Industry has a point-of-contact to find new and relevant technology.

FLC Technology Locator

The FLC Technology Locator Publishes directories that focus on special needs such as automotive materials, medical technologies, energy technologies, or computational achievements.

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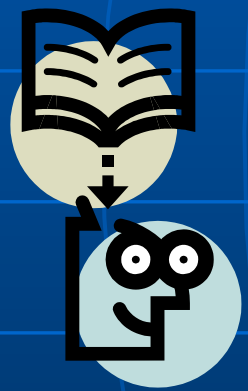

The FLC will send an industry or university technology challenge or problem to the Federal Laboratories or to a single laboratory with unique specialties.

Using the Internet to find Innovation technologies as found in the federal laboratories

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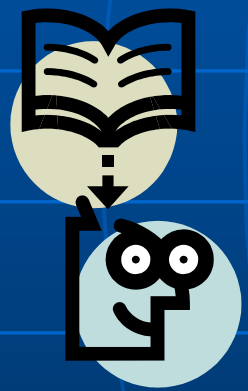
Publish Technology Challenges



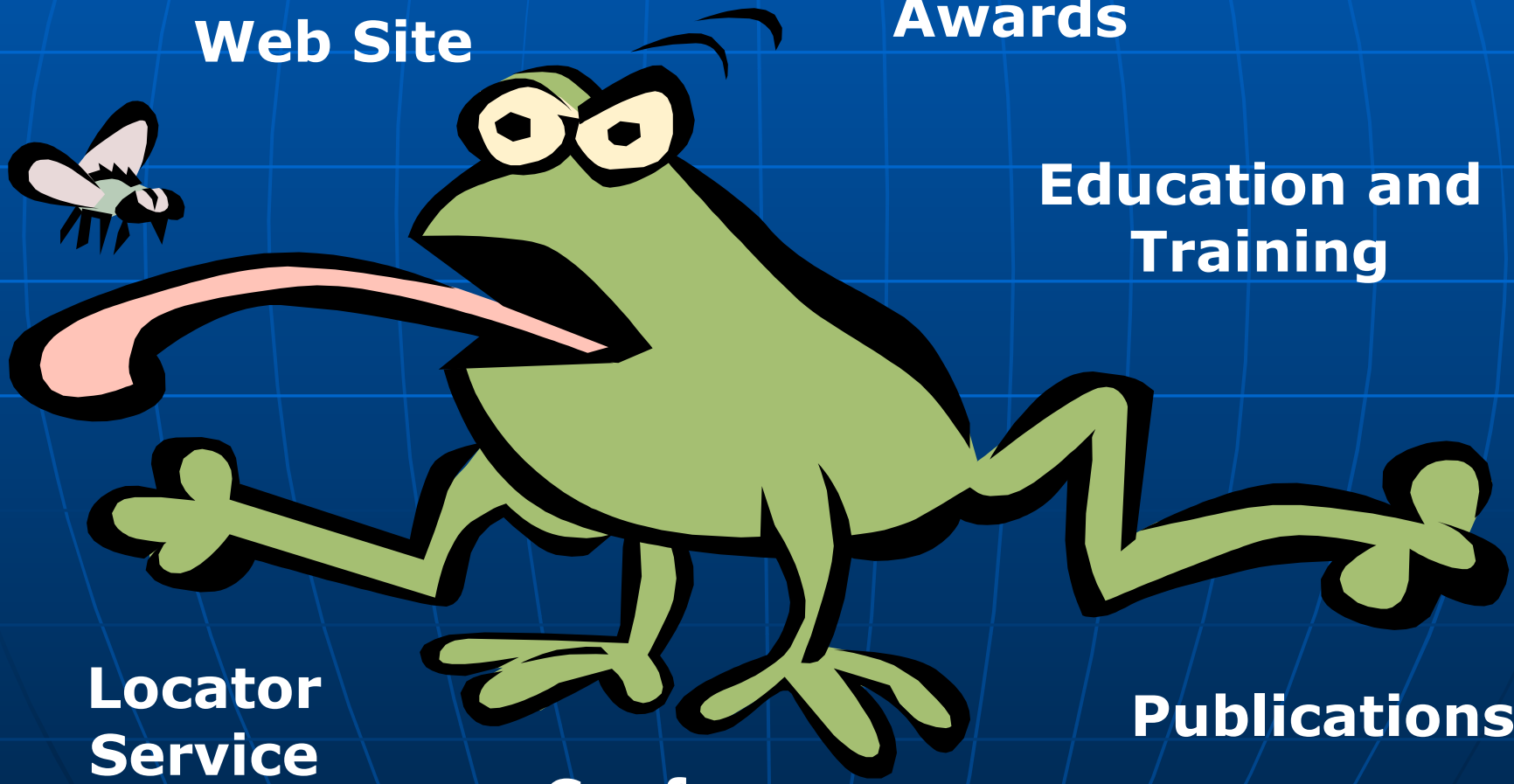
The FLC Locator service is staffed by individuals who are very knowledgeable about the different attributes of the various laboratories.

Innovation technology for a company can be found in the federal laboratories

In summary

Internet Web Site

Awards



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FLC Web Page

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