

The NCI-Frederick a Federally Funded Research and Development Center (FFRDC)

A Briefing for:
The National Cancer Advisory Board
February 18, 2010



The National Cancer Institute at Frederick

Mission:

Provide a unique national resource for the development of new technologies and the translation of basic science discoveries into novel agents for the prevention, diagnosis and treatment of cancer and AIDS.



NCI-Frederick Overview

- Established in 1971 by President Nixon - converting some Ft. Detrick labs into “a leading center for cancer research.”
- A government-owned/contractor-operated facility
- Current FFRDC contractor is SAIC-Frederick
- ~2800 employees – 2000 contractor and 800 Government
- Recently cited by *The Scientist* as one of the “Best Places to Work for U.S. Research Institutions”
- Recently cited by *The Scientist* as one of the “Best Places to Work for Postdoctoral Fellows”
- In 1975 the NCI-Frederick was designated as a Federally Funded Research and Development Center (FFRDC).

37 Government Research Centers Share the FFRDC Designation

- Argonne National Lab (DoE)
- Lawrence Livermore National Lab (DoE)
- Los Alamos National Lab (DoE)
- Brookhaven National Lab (DoE)
- Oak Ridge National Lab (DoE)
- National Defense Research Institute (DoD)
- Jet Propulsion Lab (NASA)
- **NCI-Frederick (DHHS)**

NCI-Frederick is the only FFRDC in DHHS and the only one dedicated solely to biomedical research

Definition of an FFRDC

An FFRDC is an activity that is sponsored under a broad charter by a Government Agency for the purpose of performing, analyzing, integrating, supporting, and/or managing basic or applied research and/or development, and that receive 70% or more of their financial support from the Government.

(excerpted from FAR 2.101)

Key FFRDC Characteristics

1. A long-term Government/contractor relationship is contemplated.
2. Most or all of the facilities are owned or funded by the Government.
3. The contractor has access to Government data, employees, and facilities beyond that common in a normal contractual relationship.
4. Operates in the public interest with objectivity and free of organizational conflicts of interest.

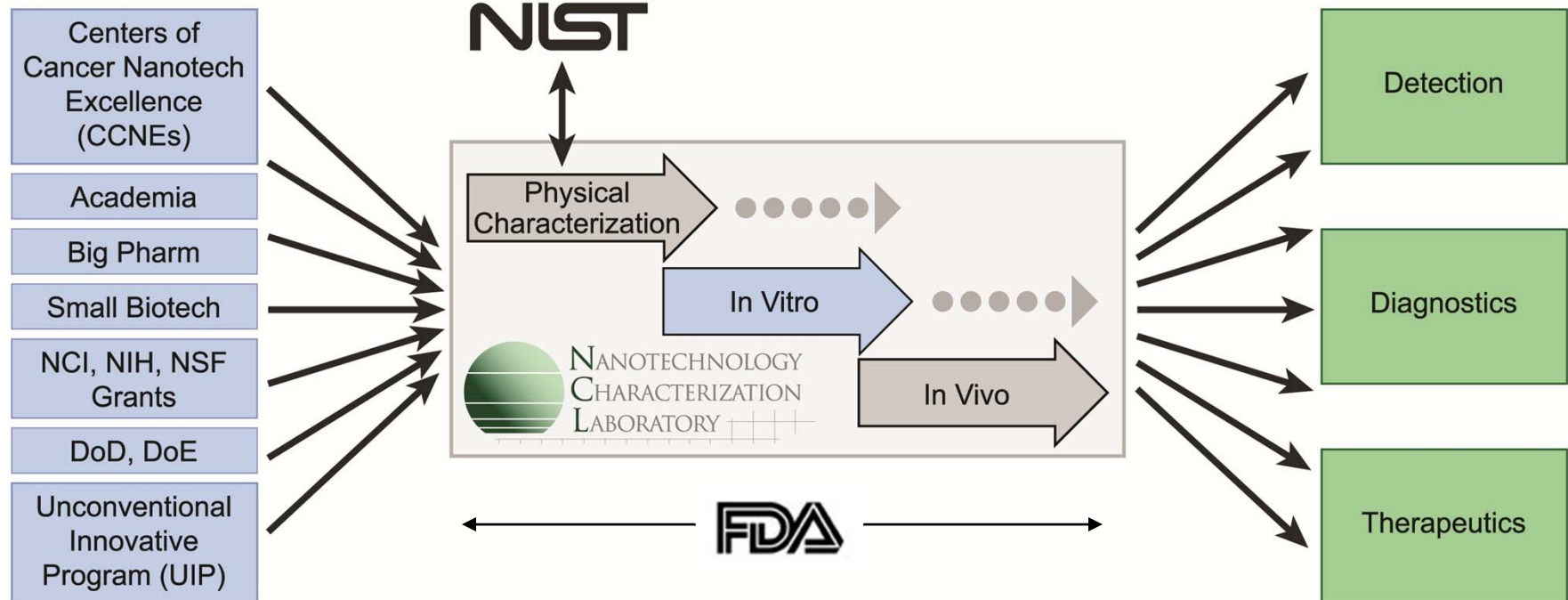


Key FFRDC Characteristics (cont.)

5. FFRDC projects generally originate in NCI Divisions, Offices, or Centers and must get Concept Approval.
6. The FFRDC may perform work for other than the sponsoring agency under the Economy Act or other applicable legislation.
7. The FFRDC status requires the contractor to meet the sponsor's rapidly changing needs by attaining a level of flexibility, creativity, and responsiveness that cannot be achieved as effectively by other government components or through other Government mechanisms.

Nanotechnology Characterization Laboratory (NCL)

Sources of Nanomaterials



NCL is a formal collaboration between NCI, FDA and NIST that accelerates the translation of nanomedicine to patients

NCI-Frederick – an FFRDC

The FFRDC provides the NCI a unique structure which facilitates:

- Flexibility** – the FFRDC provides for broad latitude in how the work is performed (in-house vs. subcontracts).
- Rapid Response** - new or cutting-edge projects can be accomplished more expeditiously because of the FFRDC broad charter and access to Government personnel.
- Increased Efficiency** – the FFRDC maintains a staff of highly trained professionals. New work can be added without incurring additional indirect costs; infrastructure costs; or fees for contract administration, management and oversight.
- Accountability** – the NCI-Frederick FFRDC is a performance-based contract (i.e. contactor profit is tied directly to performance).

Examples of How the FFRDC is Meeting the Needs of the Nation

- Nanotechnology Characterization Laboratory (NCL)
- Biopharmaceutical Development Program (BDP)
- Advanced Biomedical Computing Center (ABCC)
- Vaccine Clinical Materials Program (VCMP)
- National Community Cancer Centers Program (NCCCP)
- NCI/NIGMS Beamline Project
- NCI Biospecimen Resources Network (BRN)
- Mouse Models of Human Cancer Consortium (MMHCC)
- Cancer Bioinformatics Grid (caBIG)
- The Cancer Genome Atlas Project (TCGA)
- Therapeutically Applicable Research to Generate Effective Treatments (TARGET)

Meeting the American Recovery and Reinvestment Act (ARRA) Needs of the NCI

- caBIG Electronic Health Records (EHR)
- caBIG Cancer Cloud
- Chemical Biology Consortium (CBC)
- Cancer Human Biobank (caHUB)
- Patient Characterization Center (PCC)
- Clinical Assay Development Center (CADC)



Why use the FFRDC for these ARRA efforts?

- The FFRDC facilitates the rapid start-up requirements demanded by ARRA (e.g. staffing, subcontracts, space).
- NCI-Frederick staff have extensive experience in all of these areas.
- ARRA projects require significant Government oversight and closer than normal working relationship between contractor and NCI staff.
- Ability to phase-down at the completion of the ARRA funding (if necessary).

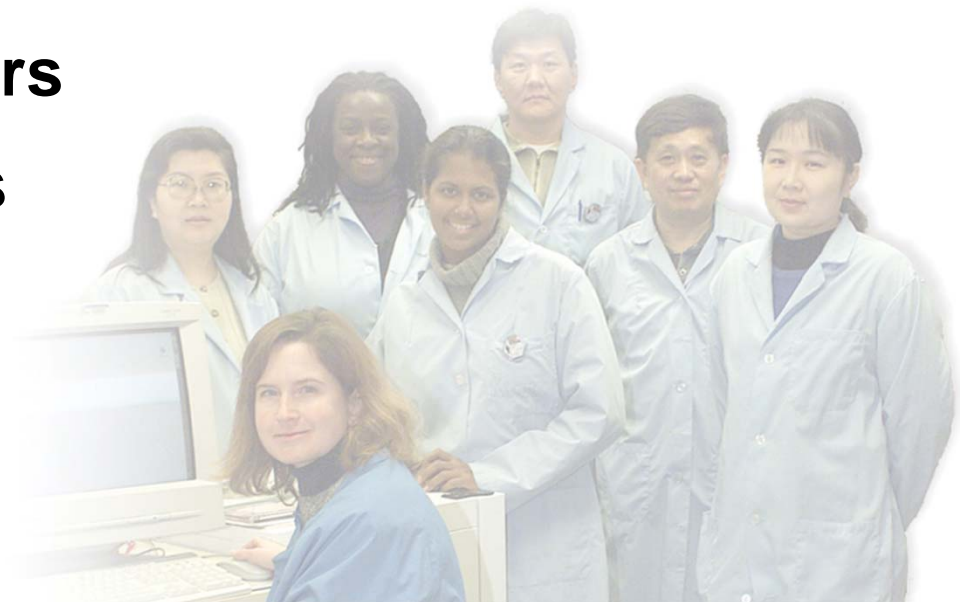
Other Examples of How the NCI-Frederick is Meeting the Needs of the Nation

- Provided basic and clinical research services to 25 of the 27 NIH ICs
- Provided advanced technology expertise and support to the DHS, DoD, FDA and USDA
- Executed more than 3,900 material transfer agreements and 30 collaborative research agreements with numerous universities and industry collaborators
- Filed more than 50% of NCI's invention reports
- Produced over 60 novel biopharmaceutical products and vaccines through two cGMP manufacturing programs
- Supported over 350 NCI and NIAID-sponsored clinical trials to test innovative cancer and AIDS treatments
- Acquired over 1.5 million clinical samples and stored over 2 terabytes of patient data in support of cancer and AIDS clinical trials worldwide
- Provided advanced biomedical computing expertise and support every year to >1,800 users as one of the world's largest computer resources dedicated to biomedical research

The NCI-Frederick - A Unique National Resource

Meeting the most urgent biomedical research needs of the nation, including:

- **The NCI**
- **Other NIH institutes**
- **Other government agencies**
- **Extramural investigators**
- **NCI corporate partners**



How can the FFRDC more effectively serve the needs of the academic, industry, and small business communities?

- Improve access to the **advanced technologies**, including;
 - Genomics and next generation sequencing
 - Protein chemistry and proteomics
 - Imaging (molecular, cellular and small animal)
- Improve access to **clinical trials resources**, including;
 - Biopharmaceutical development/production
 - Nanotechnology characterization
 - Standardized clinical assays
- Develop a **national training program** in advanced technologies, biopharmaceuticals and clinical assays
- Provide a more robust **beta-test program** for the development of new technologies
- Facilitate the use of public-private partnerships to **expedite the development of novel agents** for the prevention, diagnosis and treatment of cancer and AIDS
- Effectively develop a wider range of public-private **partnership opportunities** through the more effective use of the cost-sharing capability within the FFRDC

