

## **NIH REPORTS**

Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI)



**Council of Councils November 20, 2008** 



Access to NIH Research Results

Transparency

Accountability

And Public Confidence





#### **OPENING THE BLACK BOX**



#### RESEARCH PORTFOLIO ONLINE REPORTING TOOL (RePORT)

In addition to carrying out its scientific mission, NIH exemplifies and promotes the highest level of public accountability. To that end, the Research Portfolio Online Reporting Tool provides access to reports, data, and analyses of NIH research activities, including information on NIH expenditures and the results of NIH-expenditures and the results of NIH-expenditures are



#### REPORTS, DATA AND ANALYSES OF NIH RESEARCH ACTIVITIES

To provide NIH stakeholders with quick and easy occess to basic information on NIH programs, the NIH has created a single repository of reports, date, and analyses, along with several tools for searching this database. A common classification scheme based on the traditional NIH budget categories is used to group similar reports. Several different filters can be applied to find information specific to a particular NIH institute or Center, funding mechanism, or topic of interest.



#### NIH EXTRAMURAL DATA BOOK

The NIH Extramunal Data Book (NEDS) provides basic summary statistics on extramoral grants and contract awards, grant applications, the organizations that NIH supports, the scientific workforce, and trainess and fellows supported through NIH programs. Eablist and plants are provided in a soriety of formats, including Powerfaint (PTI) sides and Portable Document Format (PTIP) files.



NIH REPORTING
http://RePORT.NIH.GOV

#### BIENNIAL REPORT OF THE DIRECTOR,

NATIONAL INSTITUTES OF HEALTH REGULYBAIS 2006 & 2007

The NIH Eleminal Report, mandated by the NIH Reform Act of 2006, provides on assessment of the state of biomedical and behavioral resourch, a portrait of NIH research activities (integrated across oil 27 histories and Centers), some key research approaches and resources used in NIH research, and a review of those NIH Centers of Excellence that have been established by statutory mandate.





The NIH FAPORT Expenditures and Results (RAPORTER) are nations still of the second copublishes of the CREST system if reproces in Spring all both as copublishes will be enhanced with new worship secret, making the following and potential following and and extremental projects, and links to related information in other devictions such as the Notional Chargy of Medicine's high-had.





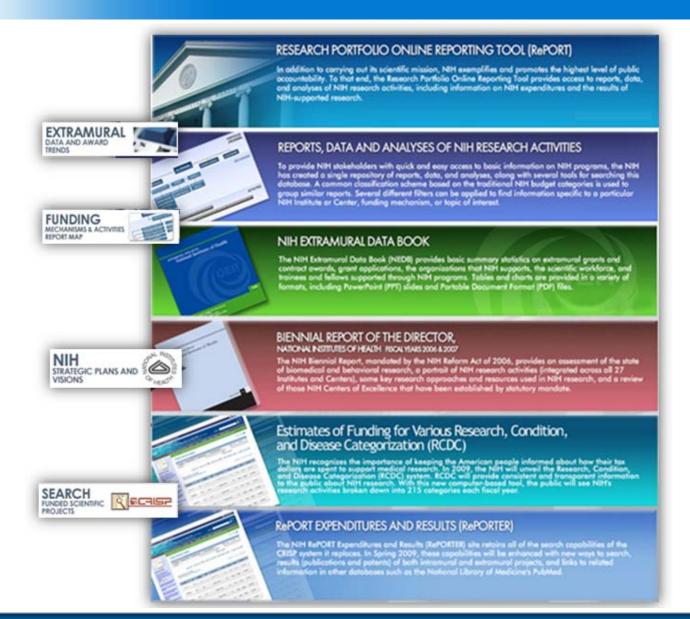
#### **NIH REPORTING GOALS**

- <u>Increase access</u> to information about NIH and the research it supports
- Increase transparency of the information generation and publishing process
- Maximize impact by <u>leveraging information technologies</u> when possible
- Standardize reporting across NIH Institutes and Centers
- Improve reliability and consistency of reports
- <u>Establish linkages</u> between disparate pieces of information
- Speed up the reporting process





#### **MEETING THOSE GOALS**





#### **REQUIREMENTS**



#### The NIH Reform Act of 2006:

# Requires establishment of electronic system of uniformly coded research grants and activities

The electronic system shall:

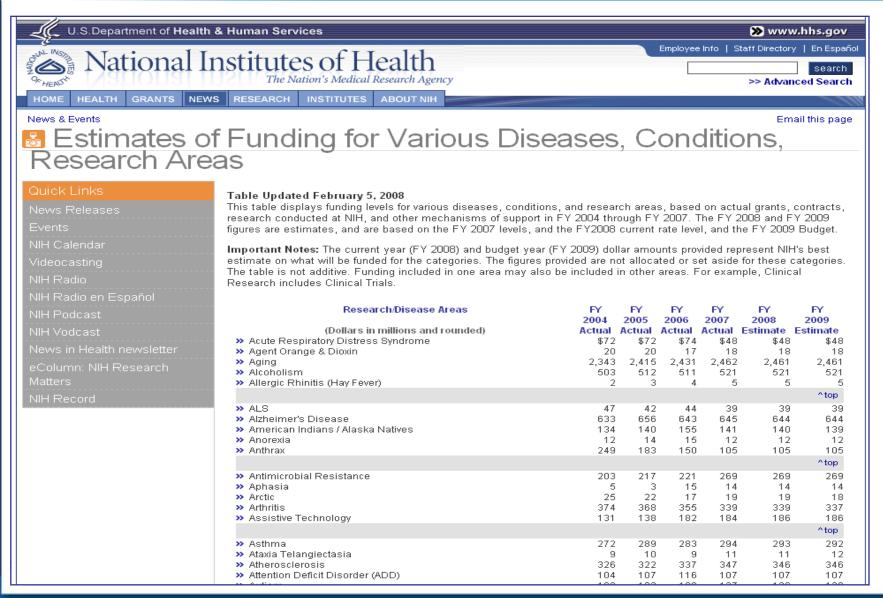
- be searchable by a variety of codes such as grant type,
   IC, and public health area of interest
- provide information on relevant literature and patents that are associated with research activities of the National Institutes of Health

Requires a summary of research activities by disease (RCDC) area, including the actual dollar amounts obligated





#### **CURRENT NIH REPORTING**





#### **CURRENT NIH REPORTING**

# Research, Condition, and Disease Categorization (RCDC) Project

- Every year, NIH reports to Congress and the public on how much it spends on research and disease areas
  - Approximately 215 categories submitted with the President's Budget
- Each institute and center defines a category as appropriate to its own mission
  - Few existing NIH-wide definitions
  - Categorization methods vary by Institute and Center
- Lack of uniformity across NIH's 27 Institutes and Centers



## **INSTITUTE OF MEDICINE REPORTS**

Scientific Opportunities and Public Needs: Improving Priority Setting and Public Input at the National Institutes of Health (1998)

#### **Recommendation:**

"NIH could approach the problem by being more systematic about deciding what to track and publish, using consistent definitions, deciding how much *'related'* as well as *'direct'* research should be included, keeping the statistics current, and ensuring quality control."

http://www.nap.edu/catalog.php?record\_id=6225





#### NIH IMPROVING OUR METHOD

- Benefits of the new Research, Condition and Disease Categorization (RCDC) system:
  - Uniform
    - Single NIH-wide definition
    - Uniform process of accounting
  - Increased Transparency
    - Web-based summary, downloadable
    - Full list of projects with dollar amounts
  - Consistent methodology
  - Central database and information source to allow for improved reporting as well as future portfolio analysis activities
  - Designed to allow for continuous improvement





#### **MOVING FORWARD: PHASE I**

- RCDC Phase 1: Fiscal year 2008 (FY08) research
  - Inclusion of extramural research grants, intramural research projects, extramural research and development (R&D) contracts and Inter/Intra Agency Agreements
  - Reporting on 215 categories that the NIH has historically reported to Congress and the public
  - Project listings reported with dollar amounts available for download
  - Side-by-side comparison of fiscal year 2007 categorization data using old and new method will be available
    - Will include FY08 Actual, Estimates for FY09 and FY10





## RCDC CHALLENGES MOVING FORWARD

- Some areas of science are not easily defined or described
  - Experts within a given area often disagree on the science
  - Continue communication and review of scientific areas
- Data inconsistency issues illuminated
  - Quality of data is variable across source databases
  - NIH-wide effort is underway to address and remove inconsistencies
- As with any automated system, false positives and false negatives will result
  - Continue to improve category fingerprints/concepts
  - Continue to research and integrate improved technologies
- Enhance and understand the continuum from basic research to disease specific research
  - The reported numbers will be different from the past
  - New methodology which includes new trans-NIH definitions



# OK HEALTH

#### **RCDC BENEFITS**

- Enhanced ability of the NIH to improve its reporting to the public and conduct portfolio analysis
- Greatly improved categorization process
  - Consistent methodology
  - Reproducible reporting
- Improved public understanding of NIH spending on research
  - Access to project listings not available previously



SEARCH FUNDED SCIENTIFIC PROJECTS	9
PROJECTS	



#### **QUICK LINKS**

NIH Extramural Data Book





<u>Current Operating Year NIH</u> <u>Budget</u>

FY 2009 President's Budget Request

NIH Extramural Awards By State and Foreign Site

NIH Extramural Awards by State and Congressional District

**Data on New Investigators** 

Estimates of Funding for Various Diseases, Conditions, Research Areas

NIH Roadmap for Medical Research

#### AWARD INFORMATION AND DATA

Award Data for Individual Organizations Research Grant Award Data Award Trends Success Rates

Training and Career Awards

Side-by-Side Comparison of NIH Research Dollars Spent in Fiscal Year 2007: NIH Current Method and the New Research, Condition, and Disease Categorization (RCDC) Reporting Tool

SEARCH	GO	EXPORT TO EXCEL	8	FONT SIZE - +	PRINT	DOWNLOAD READER

Research / Disease Areas ② (Dollars in millions and rounded)	FY2007 Current Method ② (as reported)	FY2007 RCDC Method	FY2008 Actual	FY2009 Estimate ②	FY2010 Estimate ②
>> Disease A	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease B	<u>\$</u>	\$	<u>\$</u>	\$	\$
>> Disease C	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$
>> Disease D	<u>\$</u>	\$	<u>\$</u>	\$	\$
>> Disease E	\$	\$	<u>\$</u>	\$	\$
>> Disease F	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$	\$
>> Disease G	<u>\$</u>	\$	<u>\$</u>	\$	\$
>> Disease H	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$
>> Disease I	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$
>> Disease J	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$
>> Disease K	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease L	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease M	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease N	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease O	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease P	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease Q	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease R	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease S	\$	\$	<u>\$</u>	\$	<u>\$</u>
>> Disease T	<u>\$</u>	\$	<u>\$</u>	\$	\$
>> Disease U	<u>\$</u>	\$	<u>\$</u>	\$	\$
>> Disease V	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$	\$
>> Disease W	\$	\$	<u>\$</u>	\$	\$
>> Disease X	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease Y	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
>> Disease Z	<u>\$</u>	\$	<u>\$</u>	\$	\$

**7** 

NATIONAL INSTITUTES OF HEALTH

Research Portfolio Online Reporting Tool (RePORT) BETA WEBSITE REPORTS, DATA AND ANALYSES OF NIH RESEARCH AND DEVELOPMENT ACTIVITIES

Data current as of: 27-Jan-2009

240 Project Listing Records found. Displaying 1 of 29

TE SEARCH

Google" Custom Search

<< Previous | 1 2 3 4 5 6 7 8 9 10 | Next >>

Site Map

FREQUENTLY REQUESTED REPORTS

REPORTS

CRISP

GLOSSARY

THE RESEARCH, CONDITION, AND DISEASE CATEGORIZATION (RCDC) PROJECT AT THE NATIONAL INSTITUTES OF HEALTH

FAQS LINKS

REQUEST REPORT



#### QUICK LINKS

Facts and figures on National Institutes of Health (NIH) Extramural Programs (Powerpoint -11 MB)







Current Operating Year NIH Budget, Fiscal Year 2007

FY 2008 President's Budget Request

NIH Extramural Awards By State and Foreign Site

NIH Extramural Awards by State and Congressional District

Research Grant Award Data

Training and Career Awards

Data on New Investigators

Estimates of Funding for Various Diseases, Conditions, Research Areas

Find Research on a Specific Disease or Condition

NIH Roadmap for Medical Research

# Project Listing by Category Current Project Listing Category Project Number Contract Number Funding Mechanism ALL FY 2006 FIC ALL Disease A EMAIL THIS PAGE FUNDING Mechanism ALL Contract Grant Intramural Project SEARCH PEXPORT TO PDF EXPORT TO EXCEL PRINTER FRIENDLY FORMAT AMOUNT TOTALS

Category	IC	Project Number	Sub	Project Title	PI Name	Org Name	State	Amount
Disease A	IC 1	PN 1		Project Title A	PI 1	Org A	State A	\$ 00,000
Disease A	IC 2	PN 2		Project Title B	PI 2	Org B	State B	\$ 00,000
Disease A	1C 3	PN 3		Project Title C	PI 3	Org C	State C	\$ 00,000
Disease A	IC 4	PN 4		Project Title D	PI 4	Org D	State D	\$ 00,000
Disease A	IC 5	PN 5		Project Title E	PI S	Org E	State E	\$ 00,000
Disease A	IC 6	PN 6		Project Title F	PI 6	Org F	State F	\$ 00,000



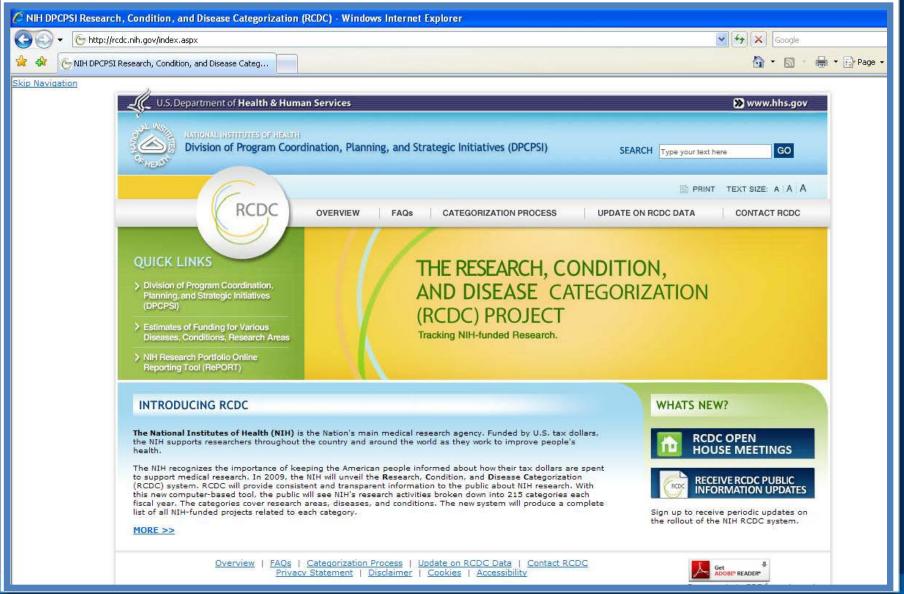
## **RCDC Review Working Groups**

- Council of Council and other NIH Advisory Council members were formed to review the functionality and content of the RCDC categorization system and provide feedback
  - Technical Review Working Group
    - Assess whether technical aspects of system achieved goal of consistency and uniformity
  - Public Review Working Group
    - Provide feedback on RCDC plans for reporting categorization information to the public
- Due to unexpected accessibility issues and increased time commitment, it was decided that the working group process should be suspended at this time.





#### FOR MORE INFORMATION





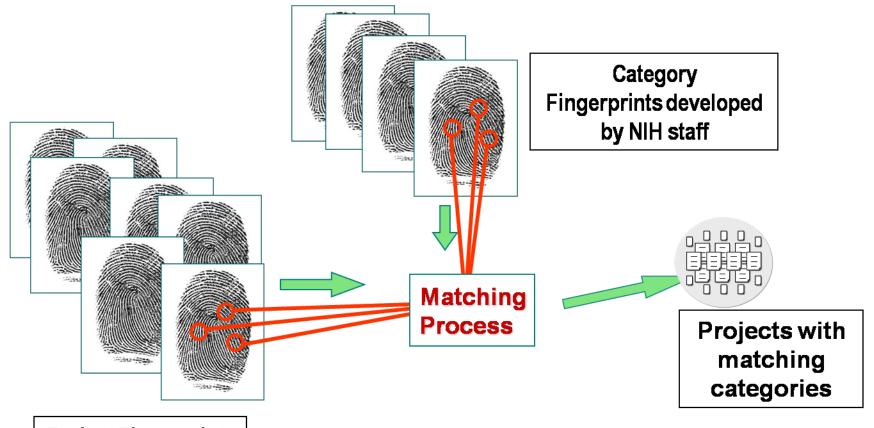
## **Background**

IF Relevant Q's are Asked





#### **How Does RCDC Work?**



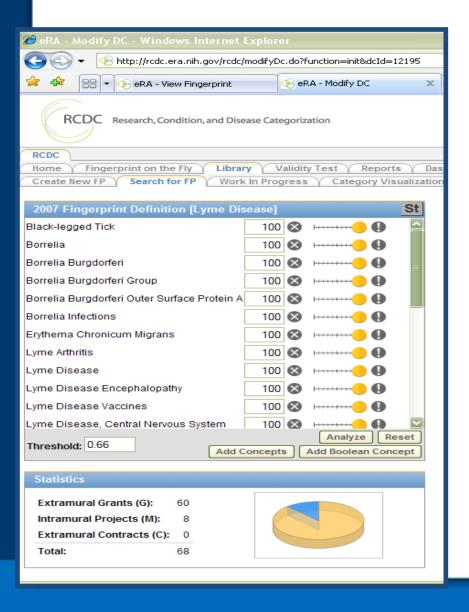
**Project Fingerprints** 

Matching compares individual <u>project</u> fingerprints to the <u>category</u> fingerprints – the resultant <u>category</u> matching score for a project is a reflection of how closely the project is related to a particular category





# Category Fingerprint (CF) Creation in the New System



# In the new system a defined Category Definition is called a Fingerprint.

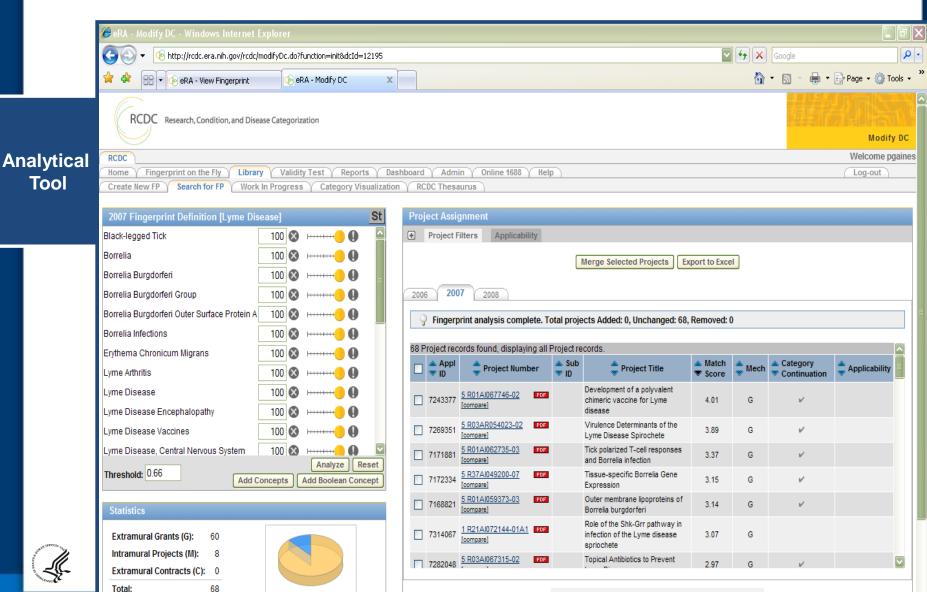
- A Fingerprint is a list of concepts from the thesaurus.
- Concepts are selected by NIH Scientific Experts to define that research category.
- Concepts can be weighted to fine-tune the system.
- The Category fingerprints are matched to the grant/project concepts to produce disease reporting.



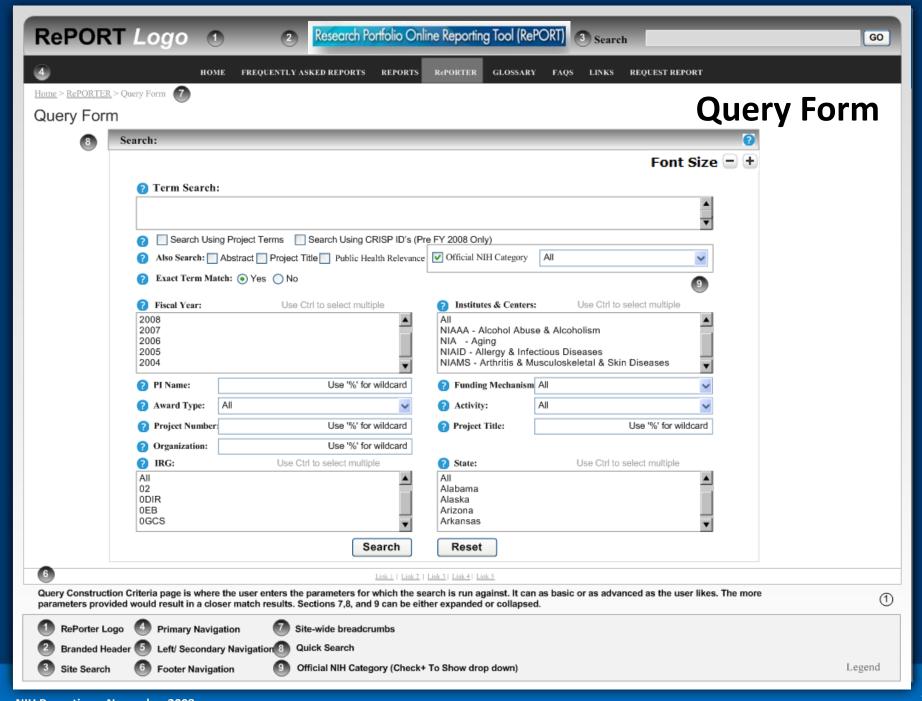
Tool

## **Lyme Disease Draft Fingerprint**

COLOR KEY: Added Projects Removed Projects







NIH Reporting – November 2008

