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1. About Federal RePORTER

Federal RePORTER is a collaborative effort led by STAR METRICS® to create a searchable database of scientific awards from federal agencies. This database promotes transparency and engages the public, the research community, and federal agencies to describe federal science research investments and provide empirical data for science policy. Users can search across multiple fields in both the Smart Search and Advanced Search functions—including across agencies or fiscal years, by the award’s project leader, or by a text search of a project’s title, terms, or abstracts.

The information found in Federal RePORTER is drawn from several extant databases — eRA databases, Medline, and PubMed Central—using newly-formed linkages among these disparate data sources.

Federal RePORTER includes information on research projects funded by:

- Administration for Children and Families (ACF)
- Agency for Healthcare Research and Quality (AHRQ)
- Agriculture Research Service (ARS)
- Center for Neuroscience and Regenerative Medicine (CNRM)
- Centers for Disease Control and Prevention (CDC)
- Combat Casualty Care Research Program (CCCRP)
- Congressionally Directed Medical Research Programs (CDMRP)
- Defense and Veterans Brain Injury Center (DVBIC)
- Department of Education (ED)
- Environmental Protection Agency (EPA)
- Food and Drug Administration (FDA)
- Forest Service (FS)
- National Aeronautics and Space Administration (NASA)
- National Center for Education Research (NCER)
- National Center for Special Education Research (NCSER)
- National Institute of Food and Agriculture (NIFA)
- National Institutes of Health (NIH)
- National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)
- National Science Foundation (NSF). NSF publications have been added using research.gov data
- U.S. Department of Veterans Affairs (VA) – funding information is not available

For agencies using the NIH’s IMPAC II Reporting Database (IRDB), AHRQ, CDC, FDA, and NIH, Federal RePORTER also includes links to publications citing support from projects in the IRDB.

The comprehensiveness of all these databases varies, as does the quality of the linkages formed among them. We continue to enhance the quality of data available in Federal RePORTER and promote greater linkages to other datasets.
1.1 Date Guidelines
➢ Project year is on the government Fiscal Year calendar of 01 October – 30 September
➢ Budget Start and End Dates refer to the time when access to the funds is available
➢ Federal RePORTER contains records for the past 12 fiscal years
➢ NIH Intramural project data is updated at the close of each fiscal year
➢ Where noted on the form a %wildcard character at the beginning and end of a string may be used to facilitate queries where the complete data desired is unknown, or to broaden the search

2. Federal RePORTER Home Page (Smart Search)

Smart Search is the default home page for Federal RePORTER application. This form allows users to quickly build queries using a simplified user interface. The production URL redirects the users to Smart Search page shown below:

https://federalreporter.nih.gov/

❖ Search – Federal RePORTER (Smart Search page)
❖ About – About Star Metrics
❖ Size Change icon [A] – allows the user to increase or decrease the text size
❖ Printer Icon – Provides a print version of the screen information
❖ Guided Tour – Provides help on how to use the search features available on Smart Search page.

❖ Send Feedback - For any questions or feedback on the content, you can reach out to the Federal RePORTER team via this online feedback form by clicking on the “SEND FEEDBACK” link.
❖ **Federal ExPORTER** - site provides raw data, Abstracts, Publications and Link table for independent analyses of research projects found in RePORTER and other database systems. **Guided Tour** feature is available here.

FAQ – Frequently Asked Federal RePORTER Questions  
Help – Star Metrics Help  
New in Release – Highlights newly added feature by release version.  
**Project Counts by Fiscal Year**: Shows projects and funding data associated with an agency on mouse over. Click on the name or a column to see the complete listing of the projects.  
**Project Counts by State**: Shows projects and funding data associated with a state on mouse over. Click on the heat map to see the complete listing of the projects.
Footer Features:

❖ **Release Notes** – link to brief description of new/updated Federal RePORTER features
❖ **User Manual** – link located in page footer
❖ **API** - Federal RePORTER API.
❖ **Site Map** – Displays site hierarchy and a central location to navigate to all the key pages.
Advanced Search – The comprehensive query form presents all data filters available on one screen. Select one filter or as many as are needed to build queries. It is organized and presented in five sections.

3. Smart Search

Conventions for using the Query Forms

Click the X-field icon to remove all of the selections
Click the X next to a selection to remove only that one

Click the plus icon to add another filter to the query

The help icon will provide a brief explanation about the associated field.

Reset – clear all form input, fiscal year is set back to the current fiscal year.
SEARCH button – click to submit the query
CLEAR button – clear all form input, fiscal year is set back to the current fiscal year.
Available Filters:

- Text Search – Boolean logic default is And, other operand options are Or and Advanced
- Fiscal Year – Default selection is the most current fiscal year data available
- Agency
- PI
- Organization
- Project Number

- To build a query using multiple filters click the PLUS icon.
**Text Search**

Boolean logic and operands can be utilized for a Text Search into project abstracts, titles, public health relevance statements, and project terms.

Enter keyword(s) to search and then the logic to be used:

**AND Logic with Multiple Words:** Boolean logic statements can be built to fine tune filtering criteria and provide more relevant Hit Lists.

When **AND** logic, the default, is used, only projects that contain all the search terms entered will be selected. The example will return all projects that contain both the words “juvenile” and “diabetes” in their Project Abstracts, Terms, Title, or Public Health Relevance Statement.

**OR Logic** with multiple words:

When **OR** logic is used, the list of projects returned only need to contain one term or the other, not both. The example will return projects that contain either “juvenile” or “diabetes”. The results of the query will include projects on juvenile drug abuse for example, in addition to those related to diabetes.

**Advanced Logic:**

Double quotes can be used to find an exact phrase in its entirety. Only projects in which the exact phrase, “juvenile diabetes” will be selected.

The **Advanced** logic option provides additional capability to narrow selection criteria more precisely, and evaluate complex entries such as chemical references. Here the use of the Boolean operators: **AND, OR, NOT, “double quotes”, and (parentheses)** to control operational precedence are all permitted.

The operands can be used together as in the expression:

**Example:** (breast and cancer) or tumor
This retrieves projects containing both of the words breast and cancer together, and projects containing the word tumor.

**Example:** (breast and cancer or “lung cancer”) not tumor

This retrieves projects containing both words breast and cancer, projects with the words lung cancer together, but not projects where the word tumor is present without one of the two conditions inside the parenthesis being present also.

**NOTE:** Words that will be ignored during a text search. *If you enter one of these words in the text search box, Federal RePORTER will not select projects based on that word alone:*

A, ABOUT, AFTER, ALL, ALSO, AN, AND, ANY, ARE, AS, AT, BE, BECAUSE, BEEN, BUT, BY, CAN, CO, CORP, COULD, FOR, FROM, HAD, HAS, HAVE, HE, HER, HIS, IF, IN, INC, INTO, IS, IT, ITS, LAST, MORE, MOST, MR, MRS, MS, MZ, NO, NOT, OF, ON, ONE, ONLY, OR, OTHER, OUT, OVER, S, SAYS, SHE, SO, SOME, SUCH, THAN, THAT, THE, THEIR, THERE, THEY, THIS, TO, UP, WAS, WE, WERE, WHEN, WHICH, WHO, WILL, WITH, WOULD

**Fiscal Year**

The default option for fiscal year is always “All” when fiscal year is not part of the search criteria or when fiscal year field is added as a field. Users can select a specific fiscal year by clicking on the field and selecting a value from the dropdown.

**NOTE:** *The NIH Fiscal Year calendar is 01 October – 30 September*
Agency

The agency responsible for administering the research grant or contract.

To view the entire options menu, click inside the box. Begin typing the agency name of the associated acronym to narrow the selections.
**PI**
A PI/Project Leader is an individual designated by the grantee to direct the project or activity supported by the grant.

Searches can be performed by entering their last name, first name, or both.

Using the % wildcard feature provides flexibility when searching gets tricky due to details such as middle initials used in one project and not another, and whether or not a period was used with the initial. If your results do not seem correct, clear the query and enter it again using the wildcard before or after the names and drop any middle initial input. Searches by name can result in multiple matches.

A maximum of 100 entries can be made, and each name pair (last name, first name); (last name, first name) must be separated by a semi-colon.

**Organization**
Organization is used to search for an institution or other entity.

The Lookup feature offers selections that meet the 3-character minimum entry. As you type, the selections will change so you can select one or many options. Click on a single option or use the Select All button. Then Click Close.

**Project Number**
For single projects enter all or any part of a Project number.
A maximum of 500 project numbers can be entered; they must be separated by a comma.
4. Project Search Results

A successful query will generate a list of projects that satisfy the submitted search criteria.

- Number of matching projects is displayed
- Display or hide the selection criteria using the toggle arrow
- Click on column titles to sort information
- Records per page menu can adjust between 25 and 100 projects per page
- Hyperlinked information is underlined
- PI Name column is highlighted as default (For text search, result as relevant sorted order)
- Faceted search available on the left with ability to further drill down into the results without the need to go back to the query form.
- Full name of agency will display by hovering mouse cursor over the short form of agency. Same feature is available on Map, Chart and Similar project too.
4.1 Faceted Search

Faceted search displays a set of dynamically generated facets or filters (from a pre-defined list) based on the original search criteria selected by a user. The faceted search displays the facet controls and the results at the same time, which makes the effects of each filter instantly visible. These facets will be displayed in the left panel and the search results will reflect in the right panel as shown in the above screenshot. One of the key objectives of the faceted search capability is to provide rapid feedback, and offer users control and freedom when searching for relevant projects data. The Agency, Department and IC are consolidated into a single hierarchy.

Following facets are currently available.

- Fiscal Year
- Agency – This facet has the below sub-categories when expanded
  - Department (Hover over Dept. code will display full form of agency as tool tip)
  - Institute/Center - (Available only for CDC centers, NIH Centers and Dept. of Education)
• Organization
• State
• Country
• Funding (Awards Amount)

The facets, filters and the counts (in parenthesis) are based on the original search criteria. Filtering of the search results based on facet selection will return a sub-set of the original search results. With each filter selection, the search page will get refreshed and the counts (in parenthesis) will change accordingly.

Counts within a facet always add up when one or more filters are selected. For example, if under Country facet, if Argentina and Angola both are selected, the total search results will be the sum of 105 and 19.

All the filter values within each facet are listed in alphabetical or numerical order. Under Country facet, United States always shows up on the top and rest of the countries in alphabetical order. State facet allows users to filter data based on one or more states. Once a specific state is selected, the Country facet will only show United States. In other scenario, if a user selects say Argentina and United States but then also selects a state then the search results will reflect the total count corresponding to that state(s) only. Query: (“United States” OR “Argentina”) AND “Alabama”

Funding amount slider rounds off the numbers based on the following rules:

- 3 significant digits if number is 6 digits long or more (round down: 123,234 -> 123,000) (round up: 123,556,677 -> 124,000,000)
- 2 significant digits if number is 5 digits long (12,345 -> 12,000)
- 1 significant digit if number is 4 digits long or less (1,234 -> 1,000) (123 -> 100) (12 -> 10)
Any exact entry can be manually typed into the min or max range.

With every selection of a filter the search results page refreshes and the URL reflects the selected filters. Users should be able to copy/paste the entire URL in a separate browser window and get the same search results.

“Revise Query” takes the user back to the query form, which will retain the original search criteria and not replace with the selected facet filters.

Default View: -
Expanded View:-

### FISCAL YEAR
- 2017 (85,273)
- 2016 (91,075)
- 2015 (92,298)
- 2014 (90,987)
- 2013 (91,689)

### AGENCY
- HHS (359,080)
- NSF (59,824)
- USDA (13,148)
  - NIFA (11,747)
  - FS (743)
  - ARS (658)
- VA (7,122)
- NASA (6,870)
- DOD (3,385)
- ED (1,280)
- EPA (613)

### ORGANIZATION

### STATE

### COUNTRY

### FUNDING
4.2 **Other Features**

Share Query – use this to share the results of the query with colleagues or as a website hyperlink. Share Query feature has a checkbox labeled, “Include facet filters”, to include the selected facet filters in the main query. This is checked by default once the user selects the facet filters to drill-down into the original search results. User can uncheck this box to exclude the facet filters from the URL before sharing or copying the link.

**Note:** The query associated with the search id (in the database) always retrieves data based on the original search criteria from the query form.

Revise Query – takes the user back to the search query form – Smart or Advanced – depending upon the form where user entered the search criteria.

---

**Export** – click arrows to display data elements
When Project Abstracts are selected for export there is a 5000 project limit. A processing message will appear when complete; this process and message varies by browser.

5. Charts and Topics

**Visualize** provides a wide variety of formats to summarize and display query results for cogent presentations.

**Charts**
The Data and Visualize Charts option provides a user driven graphical and summary table representation of the query search results.

Select the display format:
- Column
- Bar
- Pie

Using the radio buttons, select the x-axis data:
- Projects
- Project Funding
Summary by Department

Summary by Agency
**Guided Tour:** Provides help on how to use the visualize feature.

Using the Summary by menu, select the y-axis data:
- Administering Institute/Center
- Fiscal year
- Funding Mechanism
- Activity Code
- Organization
- State
- Congressional District

The Summary by menu options are driven by the x-axis choice.
For example, projects are plotted by Fiscal Year and Publications are plotted by Calendar year.

To display fewer data points, click the **Limit to Top** menu and choose a more desirable number. The project totals in the summary table are hyperlinked to the list of the projects in Federal RePORTER. Export capabilities include moving the data to **Excel** and the graph to **PowerPoint**.

**Topics**
Topics, is a user interactive feature that provides a visualization of terms present in the abstracts and title text of the projects in the search results.
Click on a circle segment to view the corresponding list of project numbers and their titles. Use the hyper-link to view a project’s detailed Federal RePORTER information.
Click export button to export data from selected segment.
6. Map

Initial display is a heat map of the project search results in the United States along with any foreign projects represented by circles.

- The intensity of the blue coloring in the U.S. map corresponds to the level of funding.
- Red circles represent each organization at the location and the size corresponds to level of funding.

The Country, State and Congressional District options provide the ability to zoom in on the area and the details of the associated projects.

In a scenario where United States and a specific U.S. state are part of the search criteria then the Map automatically zooms into that state or into the U.S. map (when two or more states are part of the search criteria) instead of showing all the countries.
Click on the State link to open a window with a listing of the projects.
View as Heat Map
Once at the State level the Congressional District menu becomes available. Each organization is represented by a circle the size of which corresponds to the amount of funding the organization has been awarded. Congressional district has a heat map. Based on selection on top map will show the projects.

To view foreign country information, click on an organization circle or select the country from the menu to shift the map view.
7. The Project Information Page

7.1 Description Tab

Click on a Project Title in order to open that Project’s Description page.

This section provides the project’s abstract and scientific terms. When available it will also contain the project’s public health relevance statement.
7.2 Details Tab

Click a Project Number from the Project Results page to open the Project Details tab.

This section provides the administrative and budget details.
7.3 Results Tab

This section provides publications and patents that cited support from the project.

<table>
<thead>
<tr>
<th>Title</th>
<th>Journal</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>antimicrobial nanoemulsion formulation with improved penetration of foliar spray through citrus leaf cuticles to control citrus huanglongbing. PLoS One. 2015</td>
<td>Chuan Kiang Yang, Charles A. Powell, Yingjing Duan, Robert Shatters, Meijun Zhang</td>
<td></td>
</tr>
<tr>
<td>Complete genome sequence of a Tomato mosaic mosaic virus isolate from the United States. Genome Announcements. 2015</td>
<td>Meijun Zhang, Yingjing Duan</td>
<td></td>
</tr>
<tr>
<td>Complete genome sequence of Tomato mosaic mosaic virus isolated from Jasmin in the United States. Genome Announcements. 2015</td>
<td>Meijun Zhang, Yingjing Duan</td>
<td></td>
</tr>
</tbody>
</table>
| Effective antibiotics against Candidatus Liberibacter asiaticus in HLB-affected citrus plants identified via the graft-based evaluation. PLoS One. 2014 | Meijun Zhang, Yingjing Duan, Charles A. Powell, Melissa S. Doutt, Chaimya Yang, Yingjing Duan | }
These patents have resulted from the work performed during the associated project; Patent data is updated from iEdison.

### 7.4 Similar Projects Tab

The **Similar Projects** section provides a listing of up to 100 projects that are similar to the selected project in subject matter, descriptions, and terms. The Match Score refers to the relative degree of similarity.

**NOTE:** Clicking on a similar project hyperlink takes you to that project, however without a return.

### 8. Advanced Query Form – Section I – AGENCY & FISCAL YEAR

- **Guided Tour** – Provides help on how to use the search features available on Advanced Search page.

#### 8.1 Fiscal Year

The default option for fiscal year is “All”; click in the box to display the complete list of available fiscal years.

Make your selections or use the Select All feature.

**NOTE:** *The NIH Fiscal Year calendar is 01 October – 30 September*
8.2 Agency

The agency responsible for administering the research grant or contract. To view the entire options menu, click inside the box. Begin typing the agency name of the associated acronym to narrow the selections.

For example: type in NIH to see all the Institute/Centers options, or you could type NIAID to select quickly.
9.1 Search by Principle Investigator (PI)/Project Leader or PI Profile ID

A PI/Project Leader is an individual designated by the grantee to direct the project or activity supported by the grant.

Searches can be performed by entering their last name, first name, or both. Check the Contact PI only box to be specific about which PI and their role. If you enter Andrew Johnson, the system will return all projects where he is the contact PI and other PI. Checking the Contact PI only limits the projects returned.

Other PI information can be seen on the Project Results page, click on et.al and under Project Details.

Using the % wildcard feature provides flexibility when searching gets tricky due to details such as middle initials used in one project and not another, and whether or not a period was used with the initial. If your
results do not seem correct, clear the query and enter it again using the wildcard before or after the names and drop any middle initial input. Searches by name can result in multiple matches.

To search for more than one PI/Project Leader click on the **Enter several PI/Project Leader names** link:

- A maximum of 100 entries can be made, and each name pair (last name, first name); (last name, first name) must be separated by a semi-colon.

### 9.2 Search by Organization

Organization is used to search for an institution or other entity.

The **Lookup** feature offers selections that meet the 3-character minimum entry. As you type, the selections will change so you can select one or many options. Click on a single option or use the Select All button. Then Click Close.

### 9.3 Search by DUNS Number

Search for grants associated with a specific DUNS Number. The DUNS number is a unique nine-digit number assigned by Dun and Bradstreet Information Services. It is recognized as the universal standard to identify and track of businesses worldwide.

### 9.4 Search by City

The city to which each grant is assigned is based on the business address of the grantee organization or contractor, not the actual location where the research being performed.
9.5 Search by State

Type the State name or enter the postal code abbreviation to view selections. You can select individual states and territories, or each as a group. The state to which each grant is assigned is based on the business address of the grantee organization or contractor, not the actual location where the research being performed.

9.6 Search by Country

All countries are selected unless a selection is made using this filter. You can select one or more individual countries. A query for only foreign awards would be made by selecting all countries except the U.S.
The country to which each grant is assigned is based on the business address of the grantee organization or contractor, not the actual location where the research being performed.

9.7 Search by Congressional District

To search by Congressional District, you must first select a State. Then the district options for that state will be displayed. You can select from the list or use the Select All. Then click Close. The congressional district to which each grant is assigned is based on the business address of the grantee organization or contractor, not the actual location where the research being performed.

10. Advanced Query Form – Section III – TEXT SEARCHES

Boolean logic and operands can be utilized for a Text Search into project abstracts, titles, public health relevance statements, and project terms. Alternatively, the filter may be limited to one or more of the areas; Project Title, Project Terms and Project Abstracts.

Search in Project Title only for the word **concussion**:
AND Logic with Multiple Words:
Boolean logic statements can be built to fine tune filtering criteria and provide more relevant Hit Lists. When **AND** logic, the default, is used, only projects that contain all the search terms entered will be selected. The example will return all projects that contain both the words *"juvenile"* and *"diabetes"* in their Project Abstracts, Terms, Title, or Public Health Relevance Statement.

OR Logic with multiple words:
When **OR** logic is used, the list of projects returned only need to contain one term or the other, not both. The example will return projects that contain either *"juvenile"* or *"diabetes"*. The results of the query will include projects on juvenile drug abuse for example, in addition to those related to diabetes.

Advanced Logic:

> **Text Search (Logic)**: "juvenile diabetes"

Double quotes can be used to find an exact phrase in its entirety. Only projects in which the exact phrase, *"juvenile diabetes"* will be selected.

The **Advanced** logic option provides additional capability to narrow selection criteria more precisely, and evaluate complex entries such as chemical references. Here the use of the Boolean operators: **AND, OR, NOT, “double quotes”, and (parentheses)** to control operational precedence are all permitted.

The operands can be used together as in the expression:

**Example**: *(breast and cancer) or tumor*

This retrieves projects containing both of the words breast and cancer together, and projects containing the word tumor.

**Example**: *(breast and cancer or “lung cancer”) not tumor*

This retrieves projects containing both words breast and cancer, projects with the words lung cancer together, but not projects where the word tumor is present without one of the two conditions inside the parenthesis being present also.

**NOTE**: Words that will be ignored during a text search. *If you enter one of these words in the text search box, Federal RePORTER will not select projects based on that word alone:*

A,ABOUT,AFTER,ALL,ALSO,AN,AND,ANY,ARE,AS,AT,BE,BECAUSE,BEEN,BUT,BY,CAN,CO,CORP,COULD,FOR,FROM,HAD,HAS,HAVE,HE,HER,HIS,IF,IN,INC,INTO,IS,IT,ITS,LAST,MORE,MOST,MR,MRS,MS,MZ,NO,NOT,
11. Advanced Query Form – Section IV - PROJECT DETAILS

11.1 Search by Project Number

For single projects enter all or any part of a Project number. A maximum of (500) project numbers can be entered, they must be separated by a comma.

11.2 Search by Project Start and/or End Date

Click the calendar icon, or enter date(s) in format MM/DD/YYYY. Project Start Date returns projects that began on or after the date entered. Project End Date returns projects that ended, or are expected to end, on or before that date.

11.3 Exclude Subprojects

Check this to eliminate the selection of NIH subprojects from the search results.