

## Inventory of Agency APIs and Other Services for Public Access Collections

To improve the discoverability of publications across federal agency repositories, the following page provides information about the Application Programming Interfaces (APIs) and other services provided by each agency. APIs simplify programming, help to support application interoperability, and facilitate the machine-to-machine discovery of public access content by third parties and additional real-time search offerings. Agencies should submit any updates to their API information to [scidgwebmanager@science.gov](mailto:scidgwebmanager@science.gov).

DEPARTMENT OF AGRICULTURE	Food and Drug Administration
DEPARTMENT OF COMMERCE	National Institutes of Health
National Institute of Standards and Technology	DEPARTMENT OF HOMELAND SECURITY
National Oceanic and Atmospheric Administration	DEPARTMENT OF TRANSPORTATION
DEPARTMENT OF DEFENSE	DEPARTMENT OF VETERANS AFFAIRS
DEPARTMENT OF EDUCATION	AGENCY FOR INTERNATIONAL DEVELOPMENT
DEPARTMENT OF ENERGY	ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF HEALTH AND HUMAN SERVICES	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Administration for Community Living	NATIONAL SCIENCE FOUNDATION
Agency for Healthcare Research and Quality	OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE
Assistant Secretary for Preparedness and Response	SMITHSONIAN INSTITUTION
Centers for Disease Control and Prevention	U.S. GEOLOGICAL SURVEY

### DEPARTMENT OF AGRICULTURE

#### PubAg API

The PubAg RESTful Web Service gives you access to the publications and related information we hold in the PubAg repository. PubAg covers all of the core topics of the agricultural sciences including nutrition, food safety, food quality, animal and crop production and protection, natural resources, sustainable agricultural systems, rural development, agricultural economic and policy issues, agricultural imports and exports, agricultural statistics, extramural research, and Extension education.

API Endpoint: <https://api.nal.usda.gov/pubag/rest/>

Documentation: <https://pubag.nal.usda.gov/pubag/rest/>

Terms of Service and/or Fair Use Policy: <https://pubag.nal.usda.gov/fair/>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key via Data.gov <a href="https://api.data.gov/signup/">https://api.data.gov/signup/</a>	REST	JSON

### DEPARTMENT OF DEFENSE

Under Development

### DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

NIST has partnered with the National Library of Medicine, part of the National Institutes of Health, to use PubMed Central (PMC) and its supporting infrastructure (including APIs and manuscript submission system) as the repository for the peer-reviewed, accepted journal literature that results from their research program(s). For more information on this database, related APIs, and collections of articles available for text mining, see the HHS entry.

#### NIH E-utilities

Using the parameters defined in the below API endpoint, the NIH eSearch service provides a list of EPA-funded PubMed Central IDs (PMCID) or PubMed IDs (PMID) that can subsequently be used in the Entrez Programming Utilities (E-utilities) suite of services for more granular metadata and information (see HHS entry for more information).

API Endpoint:

- PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=nis%20funded%5Bfilter%5D&db=pmc>
- PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=nis%20funded%5Bfilter%5D&db=pubmed>

Documentation: <https://www.ncbi.nlm.nih.gov/books/NBK25497/>

Terms of Service and/or Fair Use Policy:

[https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage\\_Guidelines\\_and\\_Requirements](https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage_Guidelines_and_Requirements)

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key	REST	XML, JSON

National Oceanic and Atmospheric Administration

#### NOAA Institutional Repository JSON REST API

The NOAA Institutional Repository JSON REST API allows you to query the repository based on its collections.

API Endpoint: <https://repository.library.noaa.gov/fedora/export/view/collection/>

Documentation: <https://repository.library.noaa.gov/help/quick-link-oaipmh-ext>

Terms of Service and/or Fair Use Policy:

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	None	REST	JSON

#### NOAA Institutional Repository OAI-PMH API

The NOAA Institutional Repository OAI-PMH API that allows you to query the repository. Requests using the API must be made using "verbs" as specified by OAI-PMH.

API Endpoint: <https://repository.library.noaa.gov/fedora/>

Documentation: <https://repository.library.noaa.gov/help/quick-link-oaipmh-summary>

Terms of Service and/or Fair Use Policy:

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	None	OAI-PMH	XML

### DEPARTMENT OF EDUCATION

#### ERIC API

The ERIC API supports searching of the online metadata repository. ERIC is a digital library of education research, sponsored by the US DEPARTMENT OF EDUCATION.

API Endpoint: Not yet deployed

Documentation: Not yet deployed

Terms of Service and/or Fair Use Policy: <https://eric.ed.gov/copyright>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	None	REST	XML, JSON, CSV

### DEPARTMENT OF ENERGY

#### DOE PAGES API

The DOE PAGES API allows you to query the Department of Energy's PAGES repository of scholarly scientific publications resulting from DOE research funding. The API is built on a REST architecture, providing predictable URLs that make writing applications easy. The API is HTTP-based, so it can be accessed using a wide variety of clients.

API Endpoint: <https://www.osti.gov/pages/api/v1/records/>

Documentation: <https://www.osti.gov/pages/api/v1/docs>

Terms of Service and/or Fair Use Policy: <https://www.osti.gov/pages/Disclaimer>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	None	REST	XML, JSON, BibTeX

### DEPARTMENT OF HEALTH AND HUMAN SERVICES

To support its public access policy, HHS uses PubMed and PubMed Central (PMC), which are resources developed and maintained by the National Library of Medicine (NLM) at the National Institutes of Health (NIH). PubMed and PMC facilitate the discovery of peer-reviewed biomedical and other scientific literature. PubMed (<https://www.ncbi.nlm.nih.gov/pubmed/>) is a database of citations and abstracts; PMC (<https://www.ncbi.nlm.nih.gov/pmc/>) is an open full-text digital archive of scholarly articles in the biomedical and life sciences. Both resources include content that falls under the public access policies of NIH and other government and private research funders, as well as a broader collection of current and historical scientific journal content collected by NLM. All articles in PMC have a corresponding record in PubMed.

NIH provides API access, through the Entrez Programming Utilities (E-utilities) and the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), to PubMed and PMC records, as well as FTP access to content.

#### Entrez Programming Utilities

E-utilities provide stable API access to article metadata and other information available in PubMed and PMC.

#### eSearch

Using the parameters defined in the API endpoints below, the eSearch service provides a list of PubMed Central IDs (PMCID) or PubMed IDs (PMID) for identifying papers funded by each HHS agency; these IDs can subsequently be used in other E-utilities services for more granular metadata and information (see eSummary and eFetch sections below).

API Endpoints:

- Administration for Community Living (ACL)
  - PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=ac%20funded%5Bfilter%5D&db=pmc>
  - PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=ac%20funded%5Bfilter%5D&db=pubmed>
- Agency for Healthcare Research and Quality (AHRQ)
  - PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=ahrq%20funded%5Bfilter%5D&db=pmc>
  - PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=ahrq%20funded%5Bfilter%5D&db=pubmed>
- Assistant Secretary for Preparedness and Response (ASPR)
  - PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=aspr%20funded%5Bfilter%5D&db=pmc>
  - PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=aspr%20funded%5Bfilter%5D&db=pubmed>
- Centers for Disease Control and Prevention (CDC)
  - PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=cdc%20funded%5Bfilter%5D&db=pmc>
  - PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=cdc%20funded%5Bfilter%5D&db=pubmed>
- Food and Drug Administration (FDA)
  - PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=fda%20funded%5Bfilter%5D&db=pmc>
  - PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=fda%20funded%5Bfilter%5D&db=pubmed>
- National Institutes of Health (NIH)
  - PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=nh%20funded%5Bfilter%5D&db=pmc>
  - PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=nh%20funded%5Bfilter%5D&db=pubmed>

Documentation: <https://www.ncbi.nlm.nih.gov/books/NBK25497/>

Terms of Service and/or Fair Use Policy:

[https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage\\_Guidelines\\_and\\_Requirements](https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage_Guidelines_and_Requirements)

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key	REST	XML, JSON

#### eSummary

An eSummary call retrieves article metadata for a PMCID or PMCID. These metadata include basic citation data as well as the PubMed ID (PMID) a given article. With a PMID, you can do a further call to get PubMed metadata for the same article, including journal ISSN(s), publication types (if available), and PubMed indexing history.

API Endpoint: <https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esummary.fcgi>

Documentation URL: <https://www.ncbi.nlm.nih.gov/books/NBK25499/#chapter4.ESummary>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key	REST	XML, JSON

#### eFetch

With a PMID for an article, an eFetch call will retrieve more robust information on an article than eSummary, including abstracts, funding data, and Medical Subject Headings (MeSH), as available.

API Endpoint: <https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi>

Documentation URL: <https://www.ncbi.nlm.nih.gov/books/NBK25499/#chapter4.EFetch>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key	REST	XML, JSON, text

#### OAI-PMH

The PMC OAI-PMH service (PMC-OAI) provides access to metadata of all items in the PMC archive, as well as to the full text of the items in the PMC Open Access Subset.

PMC-OAI is an implementation of the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), a standard for retrieving metadata from digital document repositories. PMC-OAI supports OAI-PMH version 2.0. It does not support earlier versions of the protocol.

PMC also provides a simpler OA web service, which might be more appropriate for programmatic access, depending on your requirements.

API Endpoint: <https://www.ncbi.nlm.nih.gov/pmc/oaibai.cgi>

Documentation URL: <https://www.ncbi.nlm.nih.gov/pmc/tools/oaibai/>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	None	OAI	XML, Dublin Core

#### File Transfer Protocol (FTP) Service

The FTP Service provides access to:

- File lists and files for the articles in the PMC Open Access Subset (<https://www.ncbi.nlm.nih.gov/pmc/tools/oaibai.cgi>);
- The Author Manuscript Collection (<https://www.ncbi.nlm.nih.gov/pmc/about/mscollection/>) and its file lists; and
- The Historical OCR Collection (<https://www.ncbi.nlm.nih.gov/pmc/about/hocr/>)

API Endpoint: <ftp://ftp.ncbi.nlm.nih.gov/pub/pmc>

Documentation: <https://www.ncbi.nlm.nih.gov/pmc/tools/ftp/>

Terms of Service and/or Fair Use Policy: <https://www.ncbi.nlm.nih.gov/pmc/about/copyright/>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
No	No	None	FTP	.tar.gz, PDF

### DEPARTMENT OF HOMELAND SECURITY

DHS has partnered with the National Library of Medicine, part of the National Institutes of Health, to use PubMed Central (PMC) and its supporting infrastructure (including APIs and manuscript submission system) as the repository for the peer-reviewed, accepted journal literature that results from their research program(s). For more information on this database, related APIs, and collections of articles available for text mining, see the HHS entry.

#### NIH E-utilities

Using the parameters defined in the below API endpoint, the NIH eSearch service provides a list of VA-funded PubMed Central IDs (PMCID) or PubMed IDs (PMID) that can subsequently be used in the Entrez Programming Utilities (E-utilities) suite of services for more granular metadata and information (see HHS entry for more information).

API Endpoint:

- PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=va%20funded%5Bfilter%5D&db=pmc>
- PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=va%20funded%5Bfilter%5D&db=pubmed>

Documentation: <https://www.ncbi.nlm.nih.gov/books/NBK25497/>

Terms of Service and/or Fair Use Policy:

[https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage\\_Guidelines\\_and\\_Requirements](https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage_Guidelines_and_Requirements)

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key	REST	XML, JSON

### DEPARTMENT OF TRANSPORTATION

#### National Transportation Library Repository JSON REST API

The National Transportation Library Institutional Repository JSON REST API allows you to query the repository based on its collections.

API Endpoint: <https://rosap.ntl.bts.gov/fedora/export/view/collection/>

Documentation: <https://rosap.ntl.bts.gov/help/quick-link-oaipmh-ext>

Terms of Service and/or Fair Use Policy:

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	None	REST	JSON

### DEPARTMENT OF VETERANS AFFAIRS

VA has partnered with the National Library of Medicine, part of the National Institutes of Health, to use PubMed Central (PMC) and its supporting infrastructure (including APIs and manuscript submission system) as the repository for the peer-reviewed, accepted journal literature that results from their research program(s). For more information on this database, related APIs, and collections of articles available for text mining, see the HHS entry.

#### NIH E-utilities

Using the parameters defined in the below API endpoint, the NIH eSearch service provides a list of VA-funded PubMed Central IDs (PMCID) or PubMed IDs (PMID) that can subsequently be used in the Entrez Programming Utilities (E-utilities) suite of services for more granular metadata and information (see HHS entry for more information).

API Endpoint:

- PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=va%20funded%5Bfilter%5D&db=pmc>
- PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=va%20funded%5Bfilter%5D&db=pubmed>

Documentation: <https://www.ncbi.nlm.nih.gov/books/NBK25497/>

Terms of Service and/or Fair Use Policy:

[https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage\\_Guidelines\\_and\\_Requirements](https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage_Guidelines_and_Requirements)

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key	REST	XML, JSON

### AGENCY FOR INTERNATIONAL DEVELOPMENT

#### Development Experience Clearinghouse (DEC) API

The Development Experience Clearinghouse (DEC) is USAID's institutional memory of over 250,000 agency-funded technical and programmatic documents spanning more than 50 years of US international aid. The DEC provides a snapshot in time of aid-related work conducted or sponsored by the agency in the form of documents, images, videos, maps, charts, and evaluations. The DEC website (<https://dec.usaid.gov/>) is optimized for search and discovery, where users can explore the DEC's offerings and become familiar with the system's contents and search syntax. The API is available should users need to extract large amounts of data from the DEC.

API Endpoint: <https://dec.usaid.gov/api/>

Documentation: <https://www.usaid.gov/development-experience-clearinghouse-dec-api>

Terms of Service and/or Fair Use Policy: <https://dec.usaid.gov/files/center/fair-use-policy>

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	None	REST	CSV, JSON, XML

### ENVIRONMENTAL PROTECTION AGENCY

EPA has partnered with the National Library of Medicine, part of the National Institutes of Health, to use PubMed Central (PMC) and its supporting infrastructure (including APIs and manuscript submission system) as the repository for the peer-reviewed, accepted journal literature that results from their research program(s). For more information on this database, related APIs, and collections of articles available for text mining, see the HHS entry.

#### NIH E-utilities

Using the parameters defined in the below API endpoint, the NIH eSearch service provides a list of EPA-funded PubMed Central IDs (PMCID) or PubMed IDs (PMID) that can subsequently be used in the Entrez Programming Utilities (E-utilities) suite of services for more granular metadata and information (see HHS entry for more information).

API Endpoint:

- PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=epa%20funded%5Bfilter%5D&db=pmc>
- PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=epa%20funded%5Bfilter%5D&db=pubmed>

Documentation: <https://www.ncbi.nlm.nih.gov/books/NBK25497/>

Terms of Service and/or Fair Use Policy:

[https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage\\_Guidelines\\_and\\_Requirements](https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage_Guidelines_and_Requirements)

SSL Support	Restricted Access	Authentication Model	Architectural Style	Supported Response Formats
Yes	No	API Key	REST	XML, JSON

### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA has partnered with the National Library of Medicine, part of the National Institutes of Health, to use PubMed Central (PMC) and its supporting infrastructure (including APIs and manuscript submission system) as the repository for the peer-reviewed, accepted journal literature that results from their research program(s). For more information on this database, related APIs, and collections of articles available for text mining, see the HHS entry.

#### NIH E-utilities

Using the parameters defined in the below API endpoint, the NIH eSearch service provides a list of NASA-funded PubMed Central IDs (PMCID) or PubMed IDs (PMID) that can subsequently be used in the Entrez Programming Utilities (E-utilities) suite of services for more granular metadata and information (see HHS entry for more information).

API Endpoint:

- PMC query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=nasa%20funded%5Bfilter%5D&db=pmc>
- PubMed query:  
<https://eutils.ncbi.nlm.nih.gov/entrez/eutils/efetch.fcgi?term=nasa%20funded%5Bfilter%5D&db=pubmed>

Documentation: <https://www.ncbi.nlm.nih.gov/books/NBK25497/>

Terms of Service and/or Fair Use Policy:

[https://www.ncbi](https://www.ncbi.nlm.nih.gov/books/NBK25497/#chapter2.Usage_Guidelines_and_Requirements)