

NCI BIOPORTAL USER'S GUIDE

Version 1.0



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INSTITUTE

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ABOUT THIS GUIDE

This section introduces you to the *NCI BioPortal User's Guide*. It includes the following topics:

- *Purpose* on this page
- *Audience* on this page
- *Topics Covered* on page 2
- *Additional References* on page 2
- *Text Conventions Used* on page 2
- *Credits and Resources* on page 3

Purpose

This guide provides an overview of the *NCI BioPortal*, Version 1.0. It explains how to use the BioPortal to browse and search ontologies in the LexBIG library, as well as how to submit new terms for consideration by NCI EVS staff.

Audience

Typical User

This guide is designed for researchers and other users who want to use the NCI BioPortal to find terminology from various authoritative sources on the Web.

Prerequisites

To get the most out of this guide, you should have the following skills:

- Experience browsing and searching for information on the Web
- An understanding of ontologies and their structural representation in tree and graph views

This guide is not intended for users who want to programmatically access LexBIG data. For information on programmatic access to LexBIG data, see the *caCORE EVS API Technical Guide (Version 4.0)* available at the following URL:

http://ncicb.nci.nih.gov/infrastructure/cacore_project_doc

Topics Covered

This overview explains what you will find in each chapter and appendix.

- *Chapter 1, About the NCI BioPortal*, provides an overview of LexBIG and the NCI BioPortal.
- *Chapter 2, Getting Started*, explains how to access the BioPortal Home page, introduces you to the page layout, and discusses various help options.
- *Chapter 3, Browsing Ontologies*, explains how to use the NCI BioPortal to browse the LexBIG library contents, visualize ontologies, and download supported ontologies.
- *Chapter 4, Searching Ontologies*, introduces you to the BioPortal's powerful search tools: Quick Search and Advanced Search.
- *Chapter 5, Submitting a New Term Request*, explains how to submit a new term request for consideration by EVS staff.
- *Appendix A, NCI BioPortal Glossary*, defines acronyms, abbreviations, and terminology used in this guide.

Additional References

For more information about the NCI BioPortal, see the following reference documents:

- NCI BioPortal Scope Document
- NCI BioPortal Use Case Document
- NCI BioPortal Design Document

These documents are available in *Docs* category of the *NCI BioPortal GForge* project, located at <https://gforge.nci.nih.gov/projects/lex-browser/>.

Text Conventions Used

This section explains conventions used in this guide. The various typefaces represent interface components, keyboard shortcuts, toolbar buttons, dialog box options, and text that you type.

Convention	Description	Example
Bold	Highlights names of option buttons, check boxes, drop-down menus, menu commands, command buttons, or icons.	Click Search .
<u>URL</u>	Indicates a Web address.	http://domain.com
text in SMALL CAPS	Indicates a keyboard shortcut.	Press ENTER.
text in SMALL CAPS + text in SMALL CAPS	Indicates keys that are pressed simultaneously.	Press SHIFT + CTRL.

Convention	Description	Example
<i>Italics</i>	Highlights references to other documents, sections, figures, and tables.	See <i>Figure 4.5</i> .
<i>Italic boldface monospaced type</i>	Represents text that you type.	In the New Subset text box, enter <i>Proprietary Proteins.</i>
Note:	Highlights information of particular importance	Note: This concept is used throughout the document.
{ }	Surrounds replaceable items.	Replace {last name, first name} with the Principal Investigator's name.

Credits and Resources

The following people contributed to the development of this document.

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CHAPTER 1

ABOUT THE NCI BIOPORTAL

To understand the purpose of the NCI BioPortal, you need background information on LexBIG. This chapter provides an overview of both LexBIG and the BioPortal.

Chapter Topics

- [About LexBIG](#) on this page
- [NCI BioPortal Key Functions](#) on page 6

About LexBIG

LexBIG is an open-source, public domain vocabulary server being developed by the Mayo Clinic. It is the source of content for the NCI BioPortal browser. LexBIG uses a well-structured application programming interface (API) capable of accessing and distributing vocabularies as commodity resources.

The LexBIG API provides the following key features:

- A robust, scalable, open-source implementation of EVS-compliant vocabulary services. The API specification was based on, but not limited to, fulfillment of the caCORE EVS API. This specification will be further refined to accommodate changes and requirements based on prioritized needs of the caBIG™ community.
- A flexible implementation for vocabulary storage and persistence, allowing for alternative mechanisms without affecting client applications or end users. Initial development will focus on delivery of open-source, freely available solutions, though it will not preclude the ability to introduce commercial solutions such as Oracle.
- Standard tools for load and distribution of vocabulary content. This includes, but is not limited to, support of standardized representations such as the UMLS Rich Release Format (RRF), OWL (Web Ontology Language), and Open Biomedical Ontologies (OBO).

NCI BioPortal Key Functions

The *NCI BioPortal* is a terminology browser that will ultimately replace the NCI Terminology and Metathesaurus browsers. The BioPortal enables you to perform several key functions discussed in this section.

- [Browse Tool for LexBIG Data](#) on this page
- [Search Tool for LexBIG Data](#) on this page
- [Term Submission Tool](#) on this page

Browse Tool for LexBIG Data

The BioPortal enables you to browse the contents of the LexBIG library. When browsing, you can view project information and available versions. You can also generate tree and graph views for selected ontologies.

Search Tool for LexBIG Data

As a search tool, the BioPortal provides two modes for searching terminology content:

Quick Search

Quick search enables you to search the LexBIG library across all ontologies, within certain terminologies, or in a specific terminology. You can search by class name, ID, or attributes such as synonyms.

Advanced Search

Advanced search enables you to search the content of a single ontology using an additional source, role, or association.

Term Submission Tool

The BioPortal provides a link from which you can submit a new term request for consideration by EVS staff. The New Term Request link leads to a GForge Tracker page where you can enter details about the proposed new term and then submit the request.

CHAPTER 2 GETTING STARTED

This chapter explains how to access the BioPortal Home page, introduces you to the page layout, and discusses various help options.

Chapter Topics

- *Launching the NCI BioPortal* on this page
- *About the BioPortal Home Page* on page 7
- *Getting Help* on page 9

Launching the NCI BioPortal

To launch the NCI BioPortal Home page, enter the following URL in your browser's address bar: <http://bioportal.nci.nih.gov>.

About the BioPortal Home Page

The NCI BioPortal Home page provides access to the following main functions:

- A **Browse** link for browsing LexBIG content. For more information, see *Browsing Ontologies* on page 11.
- A **Search** link for searching LexBIG content using two types of searches. For more information, see *Searching Ontologies* on page 19.
- A **New Term Request** link for submitting a new term to be considered by NCI EVS staff. For more information, see *Submitting a New Term Request* on page 27.

Figure 2.1 illustrates the layout of the Home page. The **Browse** and **Search** links shown in *Figure 2.1* enable you to freely switch between browsing and searching at any time.

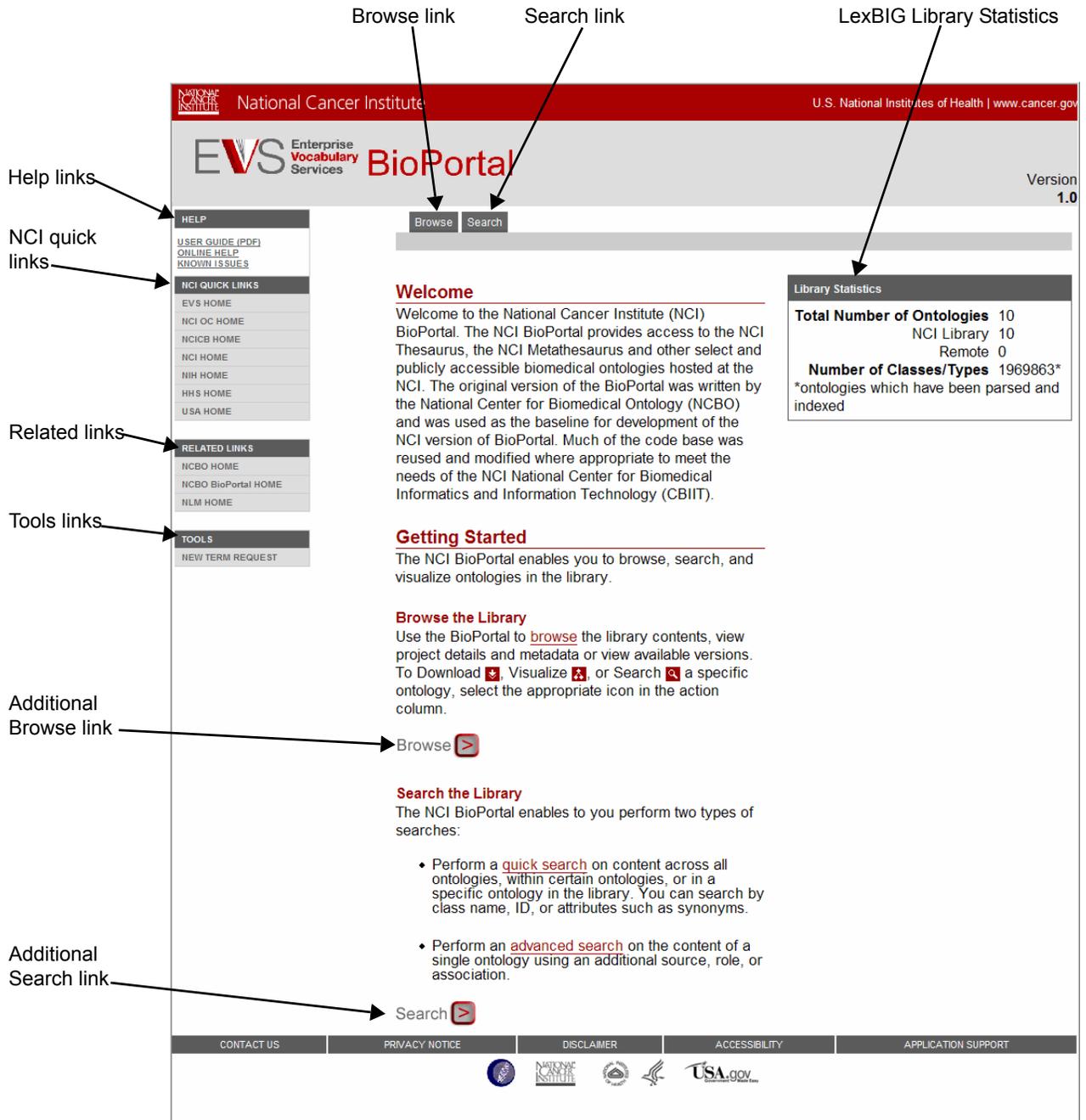


Figure 2.1 NCI BioPortal Home page

Table 2.1 on page 8 provides a brief description of the Home page features and functions.

Feature/Function	Description
Browse link	Displays a list of ontologies that are available for browsing. This link is always available. Note: A second Browse link is available in the body of the page.

Table 2.1 NCI BioPortal Home page features and functions

Feature/Function	Description
Search link	Displays a <i>Quick Search</i> page on which you can perform a quick search or switch to an advanced search. This link is always available. Note: A second Search link is available in the body of the page.
Library Statistics	Displays the current number of available ontologies and classes in the LexBIG library.
Help menu	Provides access to the <i>NCI BioPortal User's Guide</i> and online help; also provides a Known Issues link that enables you to view a list of issues for each NCI BioPortal release.
NCI Quick Links	Provide access to various NCICB sites and other related sites.
Related Links	Provide access to NCBO and NLM sites.
Tools menu	Provides a link for submitting a new term request.

Table 2.1 NCI BioPortal Home page features and functions (Continued)

Getting Help

This section provides information about various help resources:

- [Help Menu](#) on this page
- [NCI Quick Links](#) on page 10
- [NCICB Application Support](#) on page 10

Help Menu

The Help menu in the upper left corner of each BioPortal page offers the following help resources:

- The **User's Guide** link opens the *NCI BioPortal User's Guide*, a fully searchable, indexed, print-friendly PDF document. This document opens in the Adobe Reader® and contains live hyperlinks from the table of contents, cross-references, and index. You can use it online or as a printed reference.
- The **Online Help** link opens a traditional two-paned help system in which you can search and browse topics. When you request help from a specific feature such as *Quick Search*, the help system opens with the Quick Search topic displayed.
- The **Known Issues** link enables you to view a list of issues for each NCI BioPortal release.

NCI Quick Links

The **NCI Quick Links** menu on the upper left area of the page provides links to related resource sites. *Table 2.2* describes each link.

Link	Description	URL
EVS Home	Enterprise Vocabulary Services (EVS) Web site, with links to EVS tools and resources	http://evs.nci.nih.gov/
NCI OC Home	NCI Office of Communications Web site	http://oc.nci.nih.gov/
NCICB Home	NCI Center for Bioinformatics Web site, with tools and data for the biomedical community	http://ncicb.nci.nih.gov/
NCI Home	National Cancer Institute's comprehensive Web site of cancer information and resources	http://www.cancer.gov/
NIH Home	National Institutes of Health Web site	http://www.nih.gov/
HHS Home	Department of Health and Human Services Web site	http://www.hhs.gov/
USA Home	Portal page for US Government information	http://www.usa.gov/

Table 2.2 NCI Quick Links

NCICB Application Support

Online: <http://ncicbsupport.nci.nih.gov/sw/>

Telephone:

Local: 301-451-4384

Toll free: 888-478-4423

CHAPTER 3

BROWSING ONTOLOGIES

When using the NCI BioPortal, you may sometimes prefer to simply *browse* ontologies, rather than search for specific terms. This chapter explains how to browse the LexBIG library contents, as well as how to visualize and download ontologies.

Chapter Topics

- [Viewing Project Information for a Selected Ontology](#) on this page
- [Visualizing an Ontology](#) on page 15
- [Downloading an Ontology](#) on page 17

Viewing Project Information for a Selected Ontology

To select an ontology and view its details, follow these steps:

1. Click the **Browse** link at the top of the NCI BioPortal Home page, as shown in [Figure 3.1](#).

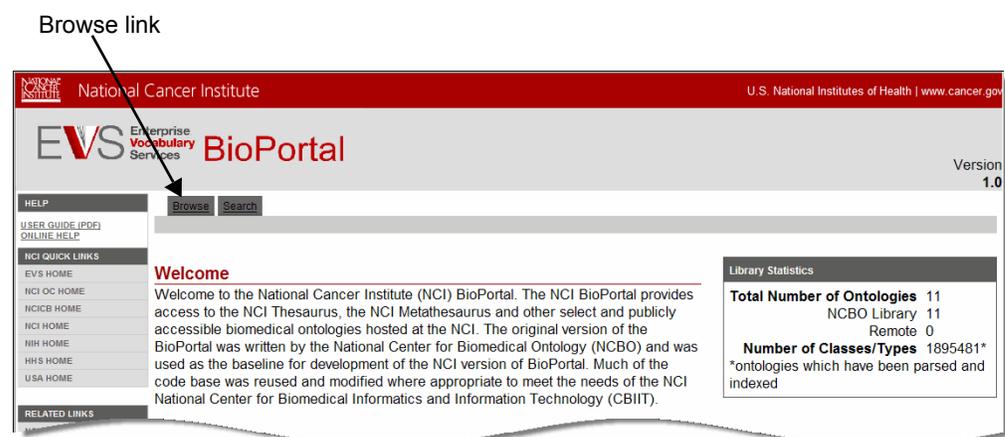


Figure 3.1 Browse link

The *Browse* page appears, as shown in *Figure 3.2*.

Ontology name Ontology format Version/location Download/Visualize/Search icons

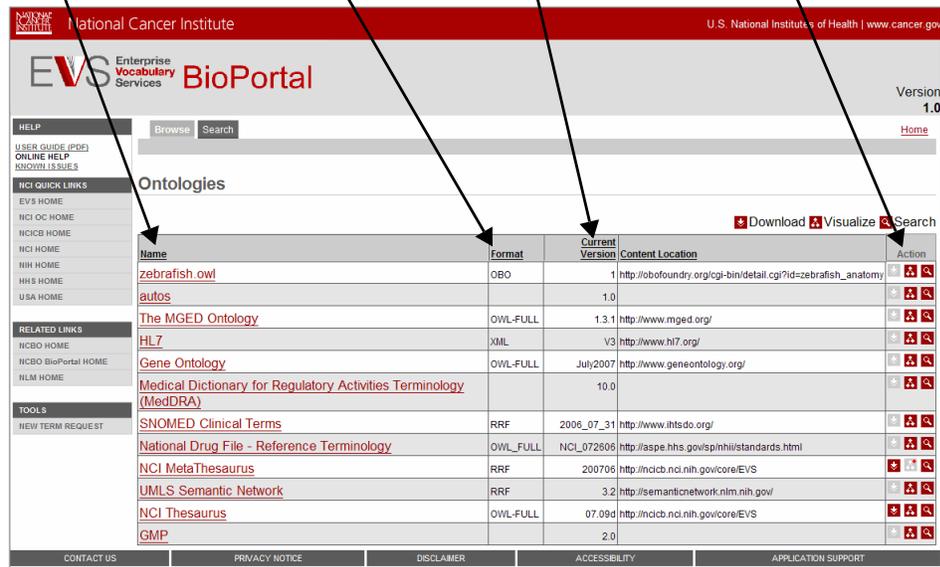


Figure 3.2 Browse page with list of ontologies

Table 3.1 describes each column on the Browse page.

Column Name	Description
Name	Displays the ontology name. Each name is a clickable link to details for the selected ontology.
Format	Shows the native format of the ontology, such as <i>OWL-FULL</i> .
Current Version	Shows the current version number or date for the ontology.
Content Location	Shows a URL for the ontology.
Action	Displays three icons for performing three different functions: <ul style="list-style-type: none"> Download enables you to download the current version of an ontology in its native format. This function is not supported for all ontologies. Visualize enables you to view the ontology in tree and graph views. This function is not available for the NCI Metathesaurus. Search switches to the <i>Quick Search</i> page. For more information, see <i>Searching Ontologies</i> on page 19.

Table 3.1 Ontology information

2. Select an ontology to browse by clicking its name in the **Name** column on the left.

The *Project Information* page appears, as shown in *Figure 3.3*.

The screenshot shows the NCI Thesaurus Project Information page. The page is titled "NCI Thesaurus" and includes a "Project Information" section. The fields in this section are:

- Ontology Name:** NCI Thesaurus
- Content Location:** http://www.bioontology.org/files/4886/Thesaurus_6_10.owl
- Format:** OWL-FULL
- Contact(s):** NCICB Support
- Home Page:** <http://ncicb.nci.nih.gov/core/EVS>
- Documentation Page:** <http://nciterms.nci.nih.gov/NCIBrowser/Dictionary.do>
- Publications Page:** (link not fully visible)
- Foundry Inclusion:** Opt-Out

The Description field contains a detailed paragraph: "The NCI Thesaurus is an ontology-like vocabulary that includes broad coverage of the cancer domain, including cancer related diseases, findings and abnormalities; anatomy; agents, drugs and chemicals; genes and gene products and so on. In certain areas, like cancer diseases and combination chemotherapies, it provides the most granular and consistent terminology available. It combines terminology from numerous cancer research related domains, and provides a way to integrate or link these kinds of information together through semantic relationships. The Thesaurus currently contains over 34,000 concepts, structured into 20 taxonomic trees. The NCI Thesaurus provides concept history tables to record changes in the vocabulary over time as the science changes. Within NCI, the Thesaurus is used to provide terminology support to the Institutes public Web portal, <http://cancer.gov>, numerous portals supporting consortia and other communities of researchers, and is used in the caCORE as the semantic base for metadata and objects that form the infrastructure upon which the NCICB portals are built (see <http://ncicb.nci.nih.gov>). It is published under an open content license in a number of formats including OWL."

Figure 3.3 Project Information page for the NCI Thesaurus

Table 3.2 summarizes the metadata available on the Project Information page.

Field	Description
Ontology Name	Shows the formal name of the ontology.
Content Location	Shows the URL for the ontology.
Format	Shows the native format of the ontology, such as <i>OWL-FULL</i> .
Categories	Identifies the ontological category to which the currently selected ontology belongs. (Not currently used.)
Keywords	Shows words that describe the selected ontology.
Key Classes/Types	Shows root concepts associated with the selected ontology.
Intended Application	Describes the intended use for the selected ontology.
Example Use	Provides a link to a Web site that demonstrates a potential use for the selected ontology.
Description	Provides a descriptive summary covering the scope, size, and use of the ontology.
Contact(s)	Shows a contact name for the ontology
Home Page	Shows a URL for the home page of the organization responsible for the ontology. For example, the Home Page field for the NCI Thesaurus links to the EVS Home page.
Documentation Page	Provides a link to documentation related to the selected ontology.

Table 3.2 Ontology metadata

Field	Description
Publications Page	Provides a link to a page that lists publications in which this ontology is referenced.
Foundry Inclusion	Tells you if the ontology is included in the OBO collaborative development experiment. (Not currently used).

Table 3.2 Ontology metadata

From the Project Information page, you can do any of the following:

- Click the **Visualize** button to visualize the ontology. For more information, see [Visualizing an Ontology](#) on page 15.
- Click the **Search** button to open a *Quick Search* page. For more information, see [Searching Ontologies](#) on page 19.
- Click the **Return to Ontologies** link to return to the *Ontologies* page.

Visualizing an Ontology

You can *visualize* an ontology as a tree view based on a *hasSubclass* hierarchy. From each branch of the tree, you can view three types of graphs.

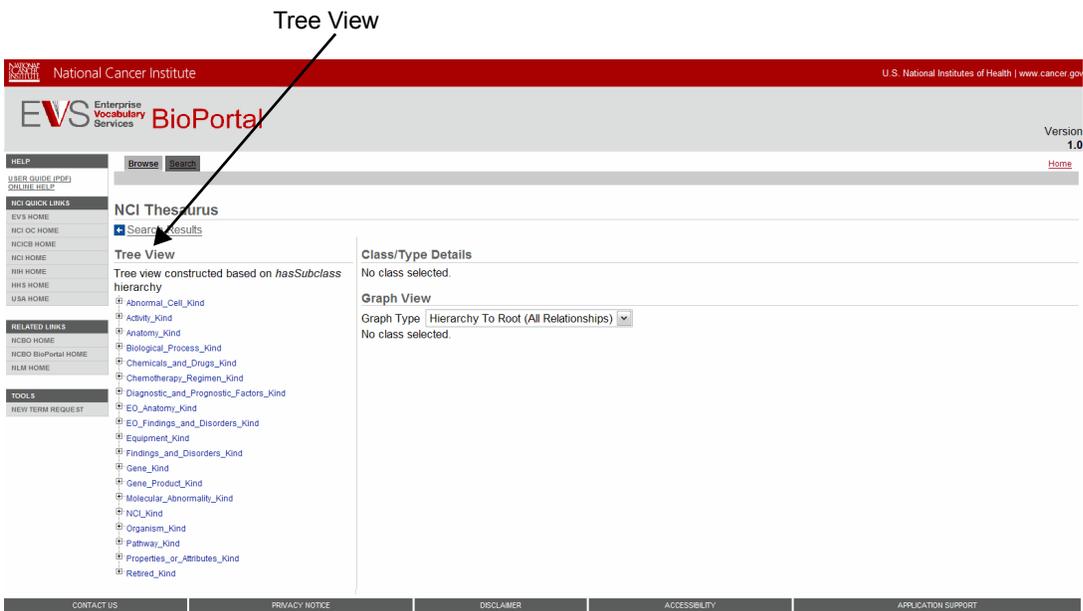
To visualize an ontology, follow these steps:

1. Start the visualization using either of the following methods:
 - From the *Ontologies* page, click the **Visualize** icon  for the ontology that you want to visualize.

The button is located in the *Action* column on the far right. Note that if this button is disabled, you cannot visualize the corresponding ontology.

- From the *Project Detail* page, click the **Visualize** button .

Both methods display a Tree View for the selected ontology, as shown in *Figure 3.4*. Graphs do not display until you select a branch on the tree.



The screenshot shows the NCI Thesaurus interface. At the top, there's a red header with 'National Cancer Institute' and 'U.S. National Institutes of Health | www.cancer.gov'. Below that is the 'EVS Enterprise Vocabulary Services BioPortal' logo. The main content area is divided into a left sidebar with navigation links (HELP, QUICK LINKS, RELATED LINKS, TOOLS) and a main content area. The main content area has a search bar and a 'Tree View' section. The 'Tree View' section shows a hierarchy of classes, with 'Biological_Process_Kind' selected. To the right of the tree is a 'Class/Type Details' section and a 'Graph View' section. The 'Class/Type Details' section says 'No class selected.' and the 'Graph View' section says 'Graph Type | Hierarchy To Root (All Relationships)' and 'No class selected.' A red arrow points from the text 'Tree View' to the tree structure.

Figure 3.4 Tree view for the NCI Thesaurus

2. To generate a graph, do either of the following:
 - Select a class in the tree by clicking the top-level class; or
 - Expand the class by clicking the plus sign (+) on the left, then click the subclass that you want to appear in the graph.

Figure 3.5 on page 16 shows a graph for *Biological_Process_Kind* > *Biological Process*. Note that Class/Type Details also appear in the area above the graph.

The screenshot displays the NCI BioPortal interface. On the left is the 'Tree View' showing a hierarchical structure of the NCI Thesaurus. The main area is split into 'Class/Type Details' and 'Graph View'. The 'Class/Type Details' section shows information for 'Biological Process' (C17828), including its definition and various attributes. The 'Graph View' section shows a 'Local Neighborhood' graph where 'Biological Process' is the central node, connected to its subclasses: Cellular Process, Merged Biological Process Concepts, Multicellular Process, Organismal Process, Pathologic Process, Population Process, Regulation, and Retired Biological Process Concepts.

Tree View

Class/Type Details

General		Attributes
Class/Type Name	Biological Process	Definition
Id	C17828	An activity that occurs between organisms or that occurs within an organism and involves the function, or modification of function by external factors, of biologic molecules, biologic complexes, subcellular components, cells, tissues, organs, or organ systems.
		NCI_META_CUI
		primitive
		CONCEPT_NAME
		Semantic_Type
		Biologic Function
		SYNONYM
		Biological Function, Biological Process

Graph View

Graph Type: Local Neighborhood

Graph showing relationships between Biological Process and its subclasses: Cellular Process, Merged Biological Process Concepts, Multicellular Process, Organismal Process, Pathologic Process, Population Process, Regulation, and Retired Biological Process Concepts.

Figure 3.5 Graph view for Biological_Process_Kind > Biological Process

3. To change the graph view, select one of the following from the *Graph Type* list:
 - **Local Neighborhood** (the default, shown in [Figure 3.5](#))
Displays a graph showing a class with a subclass one level below. The graph also shows ALL of the direct associations for the selected class.
 - **Hierarchy To Root (Subclass Only)**
Displays the selected class and any subclass relationships at the associated top node.
 - **Hierarchy To Root (All Relationships)**
Displays the selected class and all relationships at the associated top node.

Downloading an Ontology

On the *Ontologies* page, you can download the current version of some supported ontologies in their native format. The **Download** icon  is the first of the three icons appearing in the *Action* column.

To download an ontology, follow these steps:

1. On the Ontologies page, click the **Download** icon  corresponding to the ontology that you want to download.
2. Windows (or other operating system) displays a window prompting you to save the zipped file.
3. Save and extract the file to a designated directory on your computer's hard drive.

Note: If the **Download** icon appears in a faded gray color, then you cannot download the corresponding ontology. Also note that the NCI supports downloading only of ontologies that we own (NCI Thesaurus and NCI Metathesaurus). To download the NCI Metathesaurus, you need a UMLS License Number.

CHAPTER 4

SEARCHING ONTOLOGIES

Using the NCI BioPortal, you can search multiple ontologies in the LexBIG library. You can also zero in on one ontology and add a source, role, and association to the search. This chapter introduces you to the available search options.

Chapter Topics

- [Overview of Searching](#) on this page
- [Performing a Quick Search](#) on page 21
- [Performing an Advanced Search](#) on page 24
- [Performing a Concept Search](#) on page 26

Overview of Searching

The BioPortal provides several ways to initiate a search:

- On the *Home* and *Browse* pages, click the **Search** link appearing at the top of the page, as shown in [Figure 4.1](#).

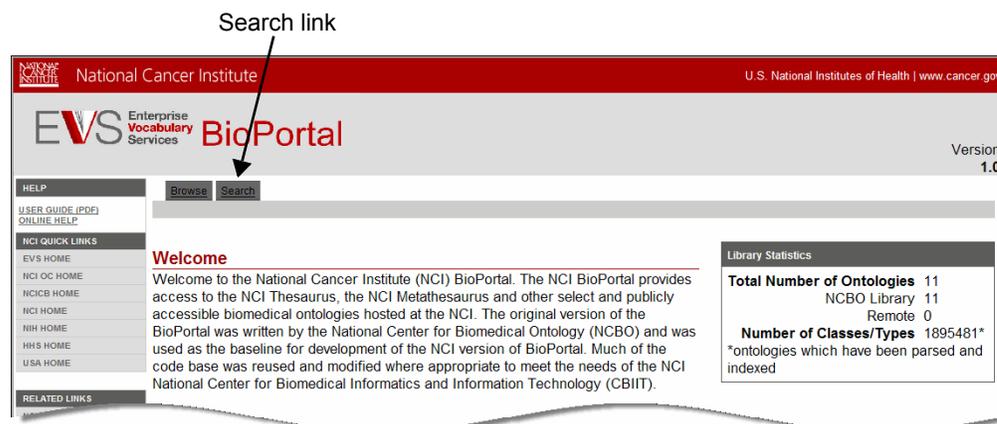


Figure 4.1 Search from the Home page

- On the *Browse* page, click the **Search** icon  corresponding to a listed ontology, as shown in *Figure 4.2*.

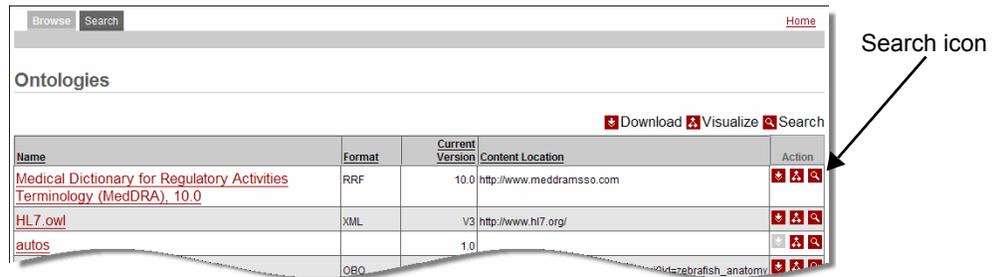


Figure 4.2 Search from the Browse page

- On the *Project Information* page, click the **Search** button , as shown in *Figure 4.3*.

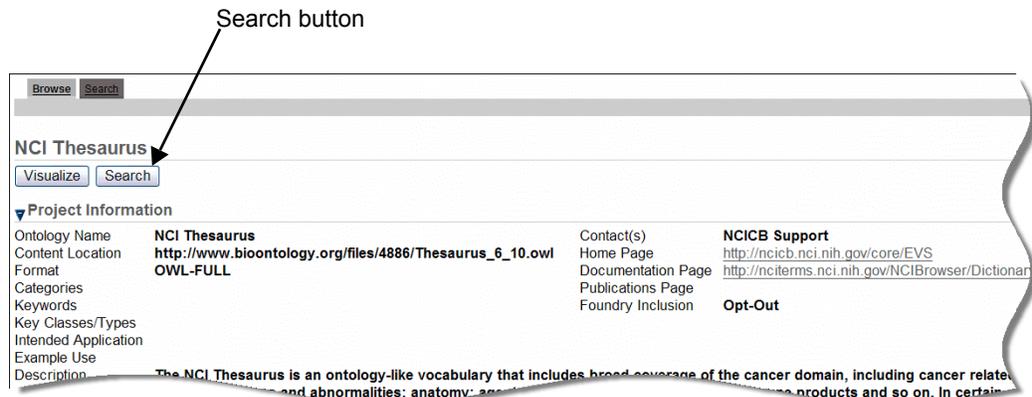


Figure 4.3 Search from the Project Information page

Each method of access launches the *Quick Search* page. You can switch between this page and the *Advanced Search* page using the **Quick Search** and **Advanced Search** links. These appear below the main **Browse** and **Search** links, as shown in *Figure 4.4*.

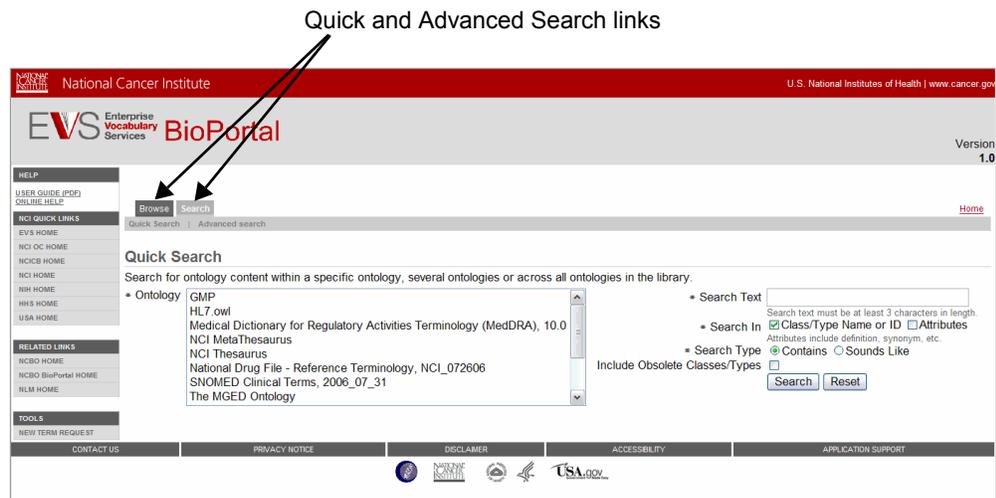


Figure 4.4 Quick Search and Advanced Search links

For more information about the methods of searching, see the following sections:

- [Performing a Quick Search](#) on this page
- [Performing an Advanced Search](#) on page 24
- [Performing a Concept Search](#) on page 26

Performing a Quick Search

A *Quick Search* enables you to search the LexBIG library across all ontologies, within certain terminologies, or in a specific terminology. You can search by class name, ID, or attributes such as synonyms.

To perform a Quick Search, follow these steps:

1. Click the **Search** link to launch the *Quick Search* page, shown in [Figure 4.5](#).

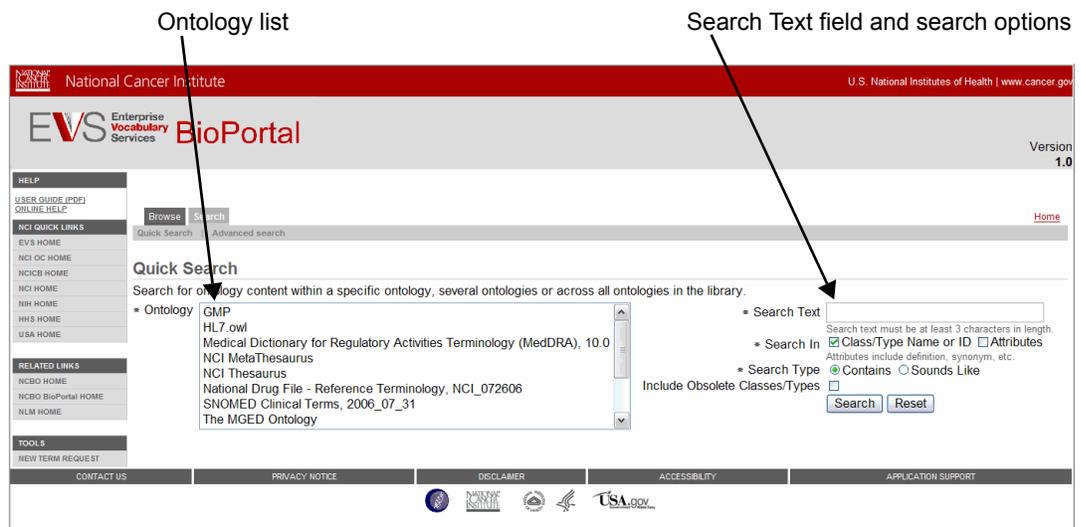


Figure 4.5 Quick Search page

2. Select options and run the search as described in [Table 4.1](#).

Feature/Function	Action
Ontology	Select one or more ontologies. When selecting multiple ontologies, press the SHIFT key for consecutive items, and press the CTRL key for non-consecutive items.
Search Text	Type a search term. The term must have a minimum of three characters and can be lowercase or uppercase.
Search In	Determine the scope of your search by selecting Class/Type Name or ID (the default), Attributes , or both. Note: You must check at least one of these two boxes before running a search. If both boxes are unchecked, a prompt reminds you to select at least one.
Search Type	Determine the search parameter by selecting either Contains (the default) or Sounds Like .

Table 4.1 Quick Search page - features and functions

Feature/Function	Action
Include Obsolete Classes/Types	Check this box if you want to include retired classes in the search results.
Search button	Click this button to run the search.
Reset button	Click this button to clear the Search Text field and set all check boxes and options to their defaults.

Table 4.1 Quick Search page - features and functions (Continued)

Figure 4.6 shows the Quick Search page with displayed search results. In this example, the selected ontology was the NCI Thesaurus, and the search term was *oncogene*. The search included attributes and used the parameter *Contains*.

Instances of the word *oncogene* are highlighted in the results list. Note also that the list includes separate tabs for viewing the Class/Type Names and Attributes.

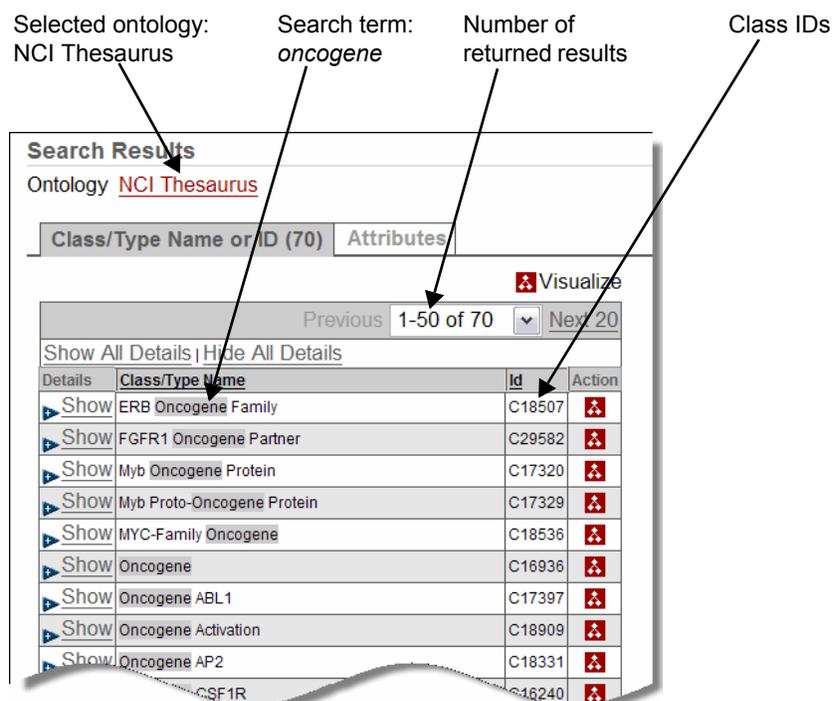


Figure 4.6 Quick Search results

3. In the Search Results list, do any of the following:
 - Click the **Show All Details** link to view more details for all of the items in the Results list.
Click the **Hide All Details** link to restore the list to the original view.
 - Click the **Show** link to the left of an item to show details for that item.
Click the **Hide** link to hide the details.

- Click a **Class/Type Name**, **Class ID**, or the **Visualize** icon  to view the class in tree and graph views.

On the Tree View page, click the **Search Results** link to return to the results list.

- If you included attributes in your search, click the **Attributes** tab to view attributes for the results. From this view, you can click on a **Class/Type Name** or **ID** to visualize the class.

Note: When you visualize a class from the **Attributes** tab, you must select from a list of sources to see the tree view, graph view, and details. After selecting a source, click the **Continue** link.

Performing an Advanced Search

An advanced search enables you to search the content of a single ontology and include a source, role, or association.

Note: The NCI Metathesaurus cannot be included in an advanced search because the roles and associations don't make sense for this coding scheme.

To perform an advanced search, follow these steps:

1. Click the **Search** link to launch the *Quick Search* page.
2. Click the **Advanced Search** link to switch to the *Advanced Search* page, shown in *Figure 4.7*.

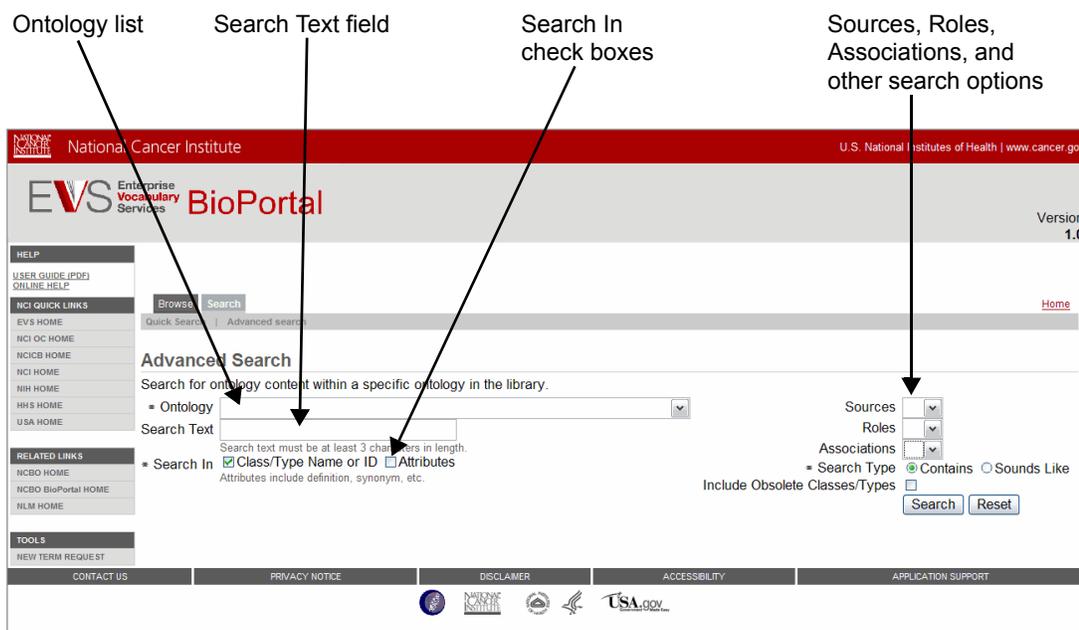


Figure 4.7 Advanced Search page

3. Select options and run the search as described in *Table 4.2*.

Feature/Function	Action
Ontology	Select an ontology from the list.
Search Text	Type a search term. The term must have a minimum of three characters and can be lowercase or uppercase.
Search In	Determine the scope of your search by selecting Class/Type Name or ID (the default), Attributes , or both. Note: You must check at least one of these two boxes before running a search. If both boxes are unchecked, a prompt reminds you to select at least one.
Search Type	Determine the search parameter by selecting either Contains (the default) or Sounds Like .

Table 4.2 Advanced Search page - features and functions

Feature/Function	Action
Sources	Select a source from the list.
Roles	Select a role from the list.
Associations	Select an association from the list.
Include Obsolete Classes/Types	Check this box if you want to include retired classes in the search results.
Search button	Click this button to run the search.
Reset button	Click this button to clear the Search Text field and set all check boxes and options to their defaults.

Table 4.2 Advanced Search page - features and functions

Figure 4.8 shows the Advanced Search page with displayed search results. In this example, the selected ontology was the NCI Thesaurus, and the search term was *oncogenesis*. Attributes were excluded from the search. The source was *NCI*, the *Gene_Plays_Role_In_Process* role was included, and the parameter was set to *Contains*.

Selected ontology: NCI Thesaurus

Search term: *oncogenesis*

Class IDs

The screenshot shows the NCI BioPortal Advanced Search interface. The search results are displayed in a table with columns for Class/Type Name, ID, and Action. The results list includes:

Class/Type Name	ID	Action
CTAG1B Gene	C39285	Show
Oncogene	C18936	Show
SRC Family Oncogene	C18540	Show
TEL-AML1 Oncogene	C18517	Show
Viral Oncogene	C19153	Show

Figure 4.8 Advanced Search results

4. In the Search Results list, do any of the following:
 - o Click the **Show All Details** link to view more details for all of the items in the Results list.
 - o Click the **Hide All Details** link to restore the list to the original view.

- Click the **Show** link to the left of an item to show details for that item.
Click the **Hide** link to hide the details.
- Click a **Class/Type Name**, **Class ID**, or the **Visualize** icon  to view the class in tree and graph views.
On the Tree View page, click the **Search Results** link to return to the results list.
- If you included attributes in your search, click the **Attributes** tab to view attributes for the results. From this view, you can click on a **Class/Type Name** or **ID** to visualize the class.

Note: When you visualize a class from the **Attributes** tab, you must select from a list of sources to see the tree view, graph view, and details. After selecting a source, click the **Continue** link.

Performing a Concept Search

You can perform a concept-based search by linking to the NCI BioPortal from within your Web application. You will need to provide the *Coding Scheme (Vocabulary)* name and the concept code for the concept you want to find.

You can link to the BioPortal from the following URL: <http://bioportal.nci.nih.gov>.

Note: The coding scheme name must match the formal name displayed on the list of ontologies. For more information, see *Browsing Ontologies* on page 11.

CHAPTER 5

SUBMITTING A NEW TERM REQUEST

The NCI BioPortal provides a link from which you can submit a new term request for consideration by EVS staff. This chapter explains how to submit a request.

Chapter Topics

- [Accessing the Main EVS Project on GForge](#) on this page
- [Completing and Submitting a New Term Request](#) on page 30

Accessing the Main EVS Project on GForge

To submit a new term request, you first need to access the *Main EVS Project* page on GForge. To access the page, follow these steps:

1. Click the **New Term Request** link in the lower left of any NCI BioPortal page.

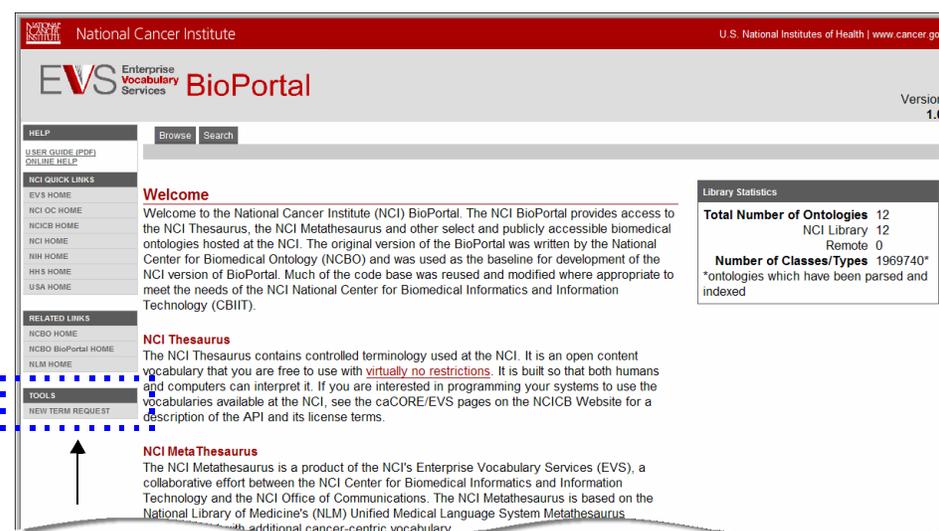


Figure 5.1 New Term Request link

The *GForge Main EVS Project* page appears, as shown in *Figure 5.2*. This page is located at <https://gforge.nci.nih.gov/projects/evs-snippets/>.

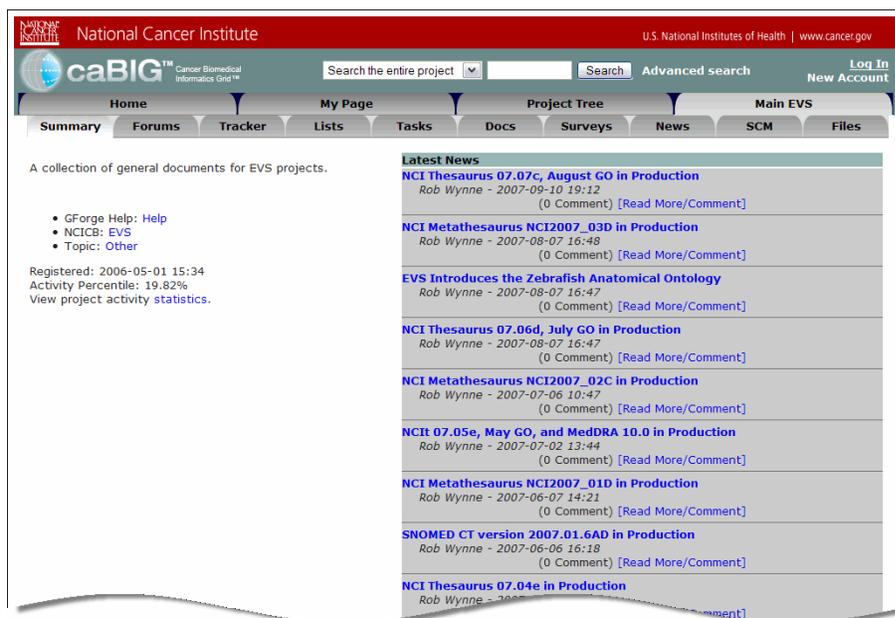


Figure 5.2 GForge EVS Main Product page

2. If you have a GForge account, log in at this point, then continue to *Completing and Submitting a New Term Request* on page 30. Otherwise, follow these steps:
 - a. Scroll down on the *Main EVS Project* page until you see the **Developer Info** section, which includes a list of names.
 - b. Click the **Request to join** link at the bottom of this section, as shown in *Figure 5.3*.

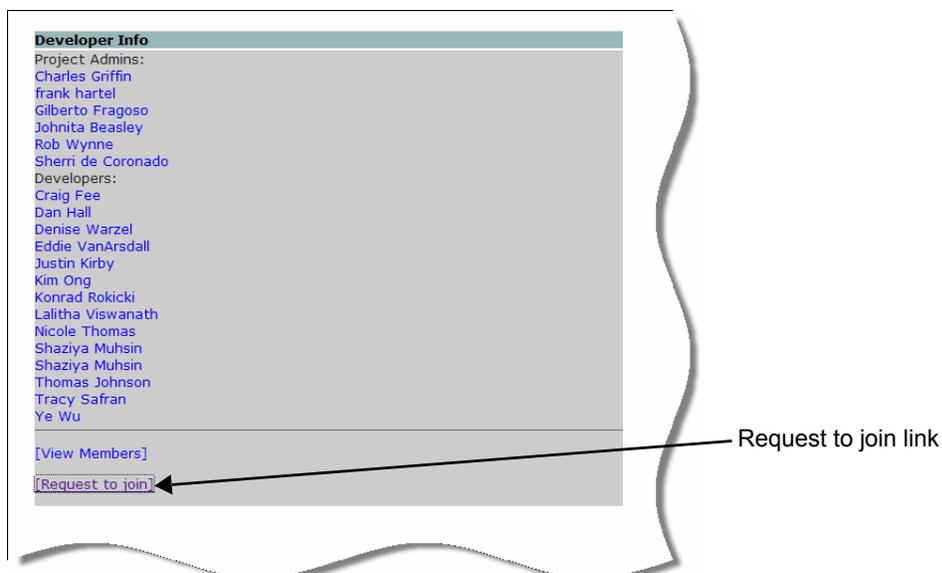


Figure 5.3 Joining a GForge project

3. When the [GForge Login](#) page appears, click the **New Account** link, as shown in [Figure 5.4](#).

Figure 5.4 New Account link

The resulting page notifies you that registration approval is required. To submit your request for an account, send an e-mail message to NCICB Application Support at ncicb@pop.nci.nih.gov.

Your e-mail message should include the following information:

- Your name
- Your affiliation
- Your address
- Your phone number
- Your valid e-mail address (required to complete the process)
- A brief description of your purpose for requesting the account

Once your request is approved, you will receive an e-mail notification. At that point, log into the *GForge Main EVS* project as specified at the beginning of this procedure, then follow the instructions found in [Completing and Submitting a New Term Request](#) on page 30.

Completing and Submitting a New Term Request

To complete and submit a new term request, follow these steps:

1. Ensure that you are logged in to the *Main EVS Project* page on GForge, located at <https://gforge.nci.nih.gov/projects/evs-snippets/>.

For more information, see *Accessing the Main EVS Project on GForge* on page 27.

2. Click the **Tracker** tab.
3. Click the **New Term Requests** link, as shown in *Figure 5.5*.

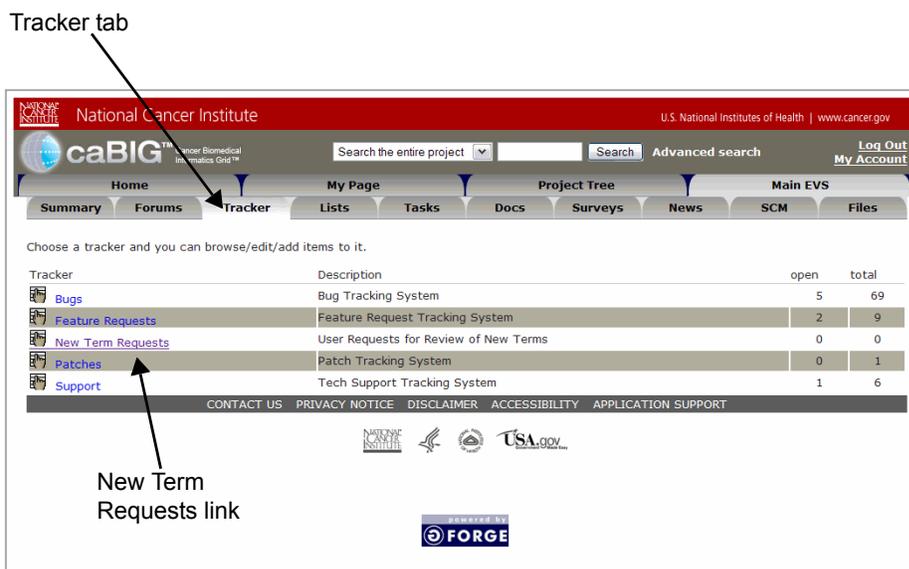


Figure 5.5 Tracker tab - New Term Requests link

4. Click the **Submit New** link, as shown in *Figure 5.6*.

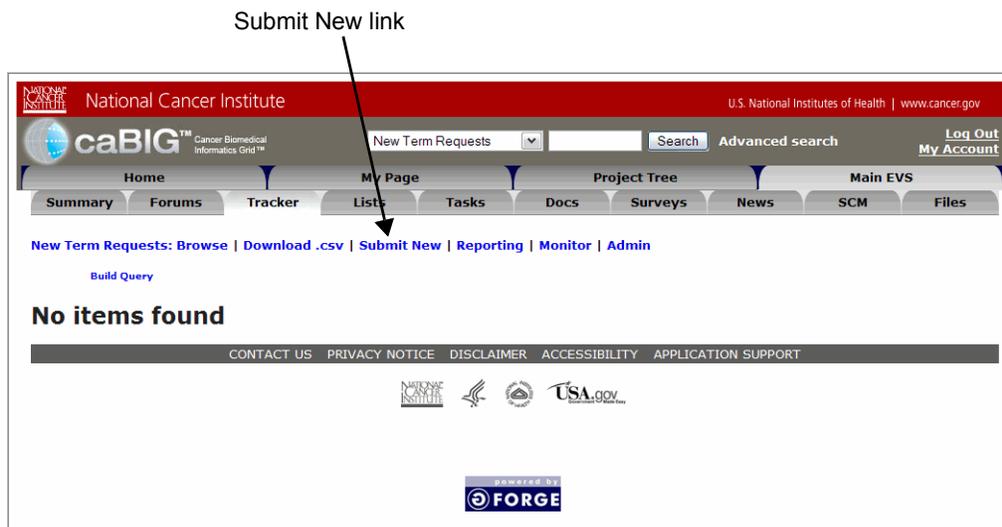


Figure 5.6 Submit New link

5. When the submission page opens, complete the fields as described in [Table 5.1](#).

Form Field	Action
Source	Select a source from the drop-down list.
caDSR Type	Select a type from the drop-down list.
New Term Name	Enter the name for the proposed new term.
Email	Enter your complete, valid e-mail address in case someone needs to contact you to discuss the submission.
Nearest Concept	Enter the name of the nearest concept for the term being submitted.
Submitter Name	Enter your name.
Phone	Enter your phone number.
Assigned To	Leave this field set to Nobody . An EVS staff administrator will assign the request.
Priority	Leave this field set to 3 . An EVS staff administrator will assign the priority level.
Summary	Write a brief summary of the need for the proposed term.
Detailed Description	Write a detailed description about the proposed term.
Check to Upload & Attach File	Check the box if you are including a file attachment. Click the Browse button to find the file and attach it.
File description	Briefly describe the file that you are including.

Table 5.1 New Term Request submission form fields

6. Click the **Submit** button.

Your request is now available for review by the designated NCI EVS staff member.

APPENDIX

A

NCI BIOPORTAL GLOSSARY

This glossary defines acronyms, abbreviations, and terminology used in the *NCI BioPortal User's Guide*.

Term	Definition
API	Application Programming Interface
caCORE	Cancer Common Ontologic Representation Environment
EVS	Enterprise Vocabulary Services
GForge	Primary site for collaborative project development for the NCI Center for Bioinformatics (NCICB) and for the NCI's Cancer Biomedical Informatics Grid™ (caBIG™).
LexBIG	Open-source, public domain vocabulary server being developed by the Mayo Clinic
RRF	Rich Release Format
OBO	Open Biomedical Ontologies
ontology	A rigorous and exhaustive organization of some knowledge domain that is usually hierarchical and contains all the relevant entities and their relations (from <i>Dictionary.com</i>).
OWL	Web Ontology Language
RRF	Rich Release Format
UMLS	Unified Medical Language System

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