

## CHAPTER 2

# GETTING STARTED IN CAARRAY

This [sectionchapter](#) introduces you to the caArray interface and its navigation as well as to global operations used in all of the caArray viewing windows.

Topics in this [sectionchapter](#) include:

- [Launching caArray on this page](#)
- [Requesting a User Account](#) on page 16
- [Using caArray Online Help](#) on page 18
- [Navigating the caArray User Interface](#) on page 19

## Launching caArray

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**Note:** caArray 2.0 supports the following browsers:

- PC's running Microsoft XP: Firefox 2.0+ and Internet Explorer 6.0+
- Apple Macs running OS X: ([TBD](#)) and Firefox 2.0+

If you have questions about this, contact NCICB Application Support, <http://ncicbsupport.nci.nih.gov/sw/>.

The caArray application can be accessed from NCICB using the following URL: <http://array.nci.nih.gov>.

For instructions about downloading and installing caArray 2.0 at your site, see your local administrator and/or refer to the *caArray Local Installation Guide* that can be downloaded from the caArray download page: <http://ncicb.nci.nih.gov/download/downloadcaarray.jsp>.

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**Note:** If you are using a local installation of caArray, contact your Principal Investigator/Laboratory Manager/System Administrator for the correct URL for your use.

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## Browsing caArray Before Login

Once you are on the caArray Portal Welcome login page, without being logged in, you can browse caArray public data or you can perform a search of caArray public objects. [Figure 2.1](#)).

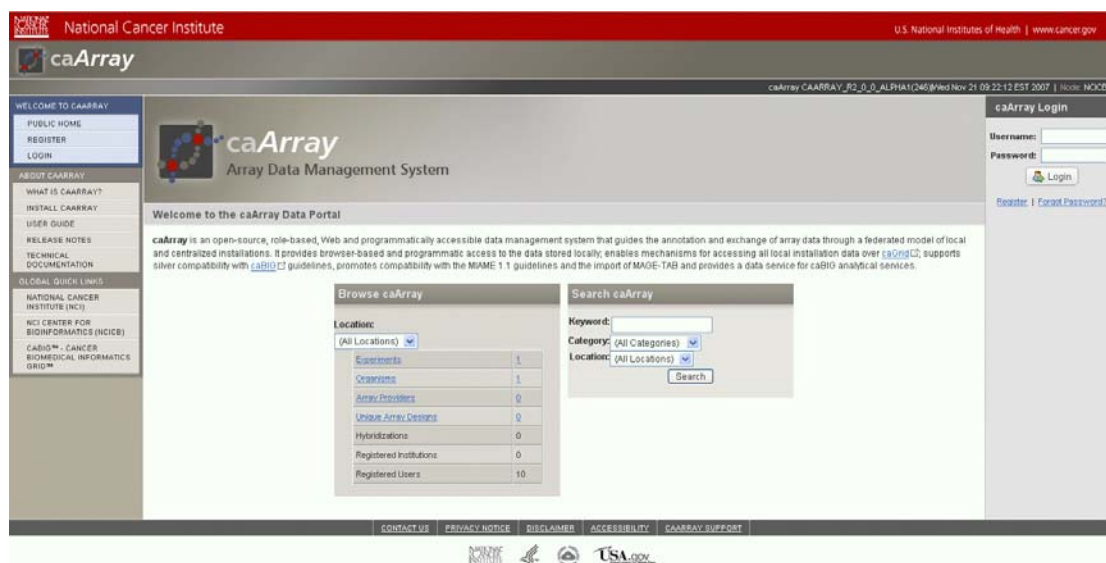


Figure 2.1 Prior to login, you can use these dialogs to browse or search the caArray database

The Browse caArray dialog box on the left center of the page lists the number of objects saved in the database, accessible to a public audience in each of the listed categories. The text categories shown in blue hypertext format can be clicked to open additional pages that display information about those categories. For more information about browsing the caArray database, see [cross reference](#).

The Search caArray dialog on the right center of the page allows you to launch a search of the caArray database for public objects. For more information about executing a caArray search, see [Searching the Repository on page 71](#).

Menu options for launching searches are more extensive if you log in, because then you will have access to all objects to which you have been granted visibility. Options allowing you to submit, view, modify, and add microarray experiment data to caArray are dependent on your user privileges, once you are logged in. See [Table 2.2 for more information](#).

**Note:** You must obtain a user account from the help desk in order to log in. For more information, see [Requesting a User Account](#) on page 16.

[Browse and Search features are only available prior to login? After login, I can see no way to launch these features. The caArray Interface](#)

*Elements of the caArray User Interface*

## caArray New User Account and Login

From the Welcome to caArray Data Portal page, you can register as a new user or log in if you already have a user account ([Figure 2.2](#)):

*Figure 2.2 caArray login page*

- To login, complete the steps below.
- To register for a new user account, see [Requesting a User Account the following section](#) for more information.

To log in, follow these steps:

1. Navigate to the caArray home page <http://array.nci.nih.gov> ([Figure 2.1](#)).
2. Enter your user ID and password in the upper right corner of the Welcome to caArray Data Portal page
3. Click **Login**.

After caArray verifies your credentials, the application opens to the caArray workspace, providing access to all features allowed by the permissions granted to you. For more information about finding your way around caArray, see [Navigating through the caArray Workflow on page 19](#).

**Note:** If you attempt unsuccessfully several times to login, you are locked out of the system. A message is sent to you explaining that the account is locked, and you are given a link to application support team to request that they unlock the account. If you do nothing, caArray will be unlocked automatically after 30 minutes.

## Requesting a User Account

To request a caArray user account, you must complete steps 1 through 4.

1. Go to the NCICB caArray login page <http://array.nci.nih.gov>.
2. Click the **Register** hypertext link, either in the left sidebar or under the caArray Login section in the upper right of the page. This opens the account registration form (*Figure 2.3*).

Figure 2.3 New user account registration form

3. In the Become a caArray User form, enter the appropriate information<sup>1</sup>.
  - Security Information
    - **Do you have an LCDAP account?**  
If Yes, enter your username and password for the purposes of verifying that it is correct. If validated, you will be granted limited access to the application immediately as a “caArray User”; this will still require confirmation from the NCICB support teams.  
If No then what?
    - **Username\***
    - **Password\***
    - **Requested role(s)\*** --Select one or more of the roles. Roles are described in *Table 2.1*. Any limits when person submitting their own

1. Items with an asterisk or highlighted are required.

request?. If what you said this week is true about permissions in 2.0, ("all roles (except Anon. User) mirroring capabilities of PI") then can every user do everything? Visibility/accessibility would just be set per experiment?

<b>Role</b>	<b>Description</b>	<b>Permissible Actions</b>
System Administrator	Person responsible for the effective operation of caArray	Manages users Manages user groups <u>Provides for overall management and quality of caArray ??</u>
Principal Investigator [PI]	Owns experiments and studies and/or projects	Submit data Review of experiment designs Submission of quality control metadata Upload of normalized data Annotation of parameters used
Lab Administrator	Same as PI in caArray 2.0	Same as PI in caArray 2.0
Lab Scientist	Same as PI in caArray 2.0	Same as PI in caArray 2.0
Biostatistician	Same as PI in caArray 2.0	Same as PI in caArray 2.0

Table 2.1 caArray role descriptions

- Account Details
  - First Name\*
  - Middle Initial
  - Last Name\*
  - Email [address]\*
  - Organization\*
  - Address [Lines 1\* and 2]
  - City Why is this not a required field?
  - State No longer listed--is this an oversight?
  - Postal [or Zip] Code Why is this not a required field?
  - Country\*--Select from the drop-down list
  - Phone\*
  - Fax

4. Click **Submit Registration Request** to execute the request, or click **Cancel** to halt the registration.

Once the request for a new account is sent to NCICB, it takes 24-72 hours to process. You will receive an email response when the account has been activated.

**Note:** Once you register, you have immediate accessibility to caArray, although your new account takes a period of time to process.

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When your account is registered, the UserID and password you are assigned determines your access rights for the software.

## Using caArray Online Help

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Verify this section after online help is implemented.




The online help explains how to use all of the features of the caArray portal.

**Note:** You can open online help without being logged into caArray.

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To access online help in caArray, click the **Help** icon or menu option on the top menu bar or on left sidebar or both?? to open the complete online help project.

Once you are in online help, several options help you locate topics of interest.

- Click the **Show in Contents** button () at the top left of the help page to open the complete online help table of contents and locate your current topic in the table.
- The breadcrumb trail at the top of the page shows the relative location of the current help topic relative to neighboring topics. Click a breadcrumb link to display that help topic.
- Click the **Back** or **Forward** links at the top of the page to display help topics you have previously viewed.
- Follow hypertext links or the **Related Topics** buttons in the help topics to open other closely related topics. If the current help page has related topics associated with it, you can also view them by clicking the **Related Topics** button () at the top right of the help page.
- Locate topics using the table of contents that displays in the left pane of the online help project or the **Index** tab that displays at the top of the Table of Contents pane.
- Perform word searches of Help by entering query text in the search text box.
- Print the current topic by clicking the **Print** button () at the top right of the help page.

**Note:** caArray 2.0 does not have context sensitive help.

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## Navigating the caArray User Interface

The caArray provides a user-friendly interface to display options relating to login, accessing documentation or performing tasks for proposed or existing experiments.

### Elements in the caArray User Interface

The terms in [the following table Table 2.2](#) identify and describe elements of the caArray user interface...

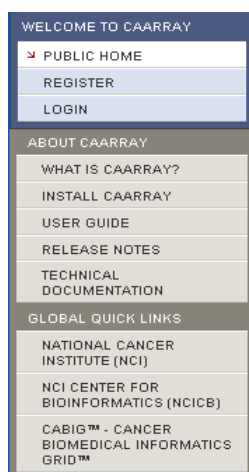
<b>Term</b>	<b>Definition</b>
<b>Left Vertical Navigation Menu</b>	Hypertext links associated with the caArray application, caArray documentation and Global Quick Links.
<b>Online help</b>	caArray documentation accessed from your computer screen providing help and answers for questions about using the software. <a href="#">How implemented?</a> <b>Note:</b> caArray 2.0 does not have context sensitive online help. You can open online help and use the TOC, index or perform a text search.
<b>Browse caArray</b> <a href="#">only before login?</a>	The <b>Browse</b> dialog lists database object categories and the number of public objects in each categories. Click each hypertext link to browse details of the listed objects.
<b>Search {caArray database objects}</b> <a href="#">only before login?</a>	The Search caArray dialog box allows you to launch a search of public objects from the Welcome page. Enter keywords or select a category or location to define the search at a basic level. Click the Advanced Search hypertext link to add further criteria to the search. For more information about caArray searches, see <a href="#">Searching the Repository</a> on page 71.
<b>Task tabs</b>	Located across the top of some of the caArray user interface windows. Task tabs represent the tasks/annotations you create as components of an experiment
<b>My Experiments/ Public Experiments</b>	caArray task tabs. These comprise sets of Experiment information and annotations performed on or associated with gene expression or SNP microarrays.

Table 2.2 *Elements of the caArray browser window*



## caArray Welcome Page Navigation Menu

The left sidebar of the caArray Welcome page provides links to an array of information.



The **Welcome to caArray** links direct you to Welcome caArray pages:

- **Public Home**--the Welcome/Login page If you click this after logging in, it appears to log you out without asking for confirmation. Is this what you intended?
- **Register**--the form for registering a new account
- **Login**--the Welcome/Login page If you click this after logging in, it appears to log you out without asking for confirmation. Is this what you intended?

The **About caArray** links direct you to various components of caArray documentation:

- **What is caArray**--description
- **caArray Installation Guide**--opens the installation guide pdf
- **caArray 2.0 User's Guide**--opens the user's guide pdf
- **Release Notes**--opens release notes for caArray 2.0
- **Technical Documentation**--link to the caArray Technical Guide
- I think a "caArray Online Help" link should be added here.

The **Global Quick Links** provide sources for caArray-related bioinformatics information on the Internet. These include links to the following websites:

- **National Cancer Institute (NCI)** (<http://www.cancer.gov/>)
- **NCI Center for Bioinformatics (NCICB)** (<http://ncicb.nci.nih.gov/>)
- **caBIG™ Cancer Biomedical Informatics Grid™** (<https://caarraydb.nci.nih.gov/caarray/>)
- **NCICB support** (<http://ncicbsupport.nci.nih.gov/sw/>) opens to a caArray project page; left in because workspace should probably have link to app support, though it currently does not. NCICB Application Support subjects (with active



hypertext links) display in the left-hand panel of the browser window (*Figure 2.4*).

**National Cancer Institute**

**Center for Bioinformatics**

HOME ABOUT NCICB INFRASTRUCTURE TOOLS PROJECTS DOWNLOADS TRAINING SUPPORT

**RELATED LINKS**

- caCORE Documentation
- NCICB Events
- Staff Directory

**GLOBAL QUICK LINKS**

- caCORE 3.2 Info and Documentation
- caGrid 1.0 now available
- cancer Biomedical Informatics Grid™ (caBIG™)
- Open Development Initiative
- Mini-guide to this web site
- caCORE FTP site
- NCICB GForge Portal

**Support**

**Welcome to the NCICB Application Support Site**

The NCICB Application Support Group is dedicated to helping you use NCICB tools and resources to maximum benefit. We're here to help you find what you need, use and re-use our software, integrate data and applications, and facilitate the sharing of information and resources.

**Telephone: 301-451-4384 or toll free: 888-478-4423**  
**Email: [ncicb@pop.nci.nih.gov](mailto:ncicb@pop.nci.nih.gov)**

Telephone support is available Monday to Friday, 8 am – 8 pm Eastern Time, excluding government holidays. You may leave a message, send an email or submit a support request via the Web at any time.

When submitting support requests via email, please include:

- ♦ your contact information
- ♦ the name of the application/tool you are using
- ♦ the URL if it is a Web-based application
- ♦ a description of the problem and steps to recreate it
- ♦ the text of any error messages you have received

For more information on a specific application, follow the links below, or go to the **Supported Applications List** for a detailed breakout of all supported applications.

**NCICB User Applications Manual**

The NCICB User Applications Manual provides a thorough introduction to NCICB applications.

**Web Self-Service**

**Search FAQs**

Search our dynamic knowledgebase of Frequently Asked Questions (FAQs).

**CONTENTS**

<a href="#">Cancer Centralized Clinical Database (C3D)</a>	<a href="#">Centra</a>
<a href="#">caArray</a>	<a href="#">Clinical Research Information Exchange (CRIX)</a>
<a href="#">caDSR Applications</a>	<a href="#">DCP Enterprise System Knowledgebase (DESK)</a>
<a href="#">Cancer Images Database (caIMAGE)</a>	<a href="#">Enterprise Vocabulary Services (EVS)</a>
<a href="#">Cancer Laboratory Information Management System (caLIMS)</a>	<a href="#">Programming &amp; API Support</a>
<a href="#">Cancer Model Organisms Database (caMOD)</a>	

*Figure 2.4 An example of the NCICB Quick Link help topic, in this case NCICB Application Support page.*

## Experiment Workspace

**Note:** This section describes in limited detail the elements of the Experiment user interface. For more information about working with Experiments, see [later chapters](#) in the guide.

Upon login, in the user interface the Experiment Workspace displays tabs and options relating to existing experiments or other experiments you may propose.

The screenshot shows the 'My Experiment Workspace' interface. At the top, there are tabs for 'Work Queue (4)', 'Completed Experiments (1)', and 'Public Experiments (0)'. A button 'Add a New Experiment' is on the right. Below the tabs, it says 'Displaying 1-4 of 4 Total.' and 'Page 1 < Back | Next >'. The main table has columns: Experiment Title, Array Type, Organism, Disease State, Status, Date Created, # Samples, Properties, Edit, and Delete. The table contains four rows of experiment data.

Experiment Title	Array Type	Organism	Disease State	Status	Date Created	# Samples	Properties	Edit	Delete
<a href="#">armst-affy-arabi-316282</a>	Affymetrix	Mouse	Acute Lymphoblastic Leukemia, Adult	Draft	09/23/2007	<a href="#">121</a>			
<a href="#">arnol-affy-chick-445892</a>	Affymetrix	Human	Cancer	Draft	10/01/2007	<a href="#">121</a>			
<a href="#">freij-affy-human-91666</a>	Affymetrix	Mouse	Brain Stem Glioma, Childhood	Draft	09/23/2007	<a href="#">121</a>			
<a href="#">prosc-affy-mouse-450860</a>	Affymetrix	Human	Cancer	Draft	10/01/2007	<a href="#">121</a>			

Page 1 < Back | Next >

Figure 2.5 caArray Experiment Workspace

The three most common uses of caArray are described as follows:

- Submit new data, or modify existing data ( with appropriate permissions)
- Search public or private data already in the caArray system
- User and group management (with appropriate permissions)

The workspace displays three tabs:

1. **Work Queue**--proposed experiments in process of being created. This tab is now gone. Does it display only if user is in the process of creating an Experiment?
2. **My Experiments** - Proposed experiments that have been submitted for review
3. **Public Experiments** - Experiments that have been submitted and accepted with public visibility into the caArray database. For more information about visibility, see [cross ref.](#)

Will there be other tabs for people given private access to other Experiments? If so, what will they be called?

The listed Experiments on each tab are visible in table format, according to the permissions assigned to you. The column headings display fields populated with information for each corresponding experiment.

- **Experiment ID**--The ID autogenerated by caArray; click the hypertext link to open Experiment details
- **Experiment Title**--name designated for the experiment by the Principle Investigator or his/her designee
- **Assay Type**--the category of array assay type for this Experiment; either **Gene Expression** or **SNP**
- **Samples**--the number of samples used in the Experiment. Click the hypertext link to open the Annotations tab to the Samples details page.
- **Status**--The current status of the Experiment: **Draft** or **Completed**
- **Permissions**--The accessibility given the corresponding Experiment. Click the icon to assign or modify the Experiment Permissions.
- **Edit**--For Experiments with the appropriate permissions, allows the user to edit the Experiment. What happens if user does not have permissions--no icon, different icon, or nothing happens when user clicks it?

Each of the tasks is described in separate [sections](#) [chapters](#) in this [user's guide](#) [online help](#).

Online help and additional resource links remain fixed through all the viewing windows.

