caArray 050 - Introduction to caArray - Browse and Search caArray Repository

Introduction to caArray: Browse and Search caArray Repository

Topic: caArray Usage

Release: Up to caArray 2.x

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Browse caArray Repository

The browsing feature in caArray is available to all visitors with or without an account. However, without login a user can only see public data. Once logged in, a user can view public data and non-public data for which the user has permissions.

caArray offers four options to browse through experiments in caArray repository.

- 1. Experiments
- 2. Organisms
- 3. Array Providers
- 4. Unique Array Designs

Browse caArray Options

L	ocation	
(All Location	s)	*
Experiments	1	18
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Browsing by the Experiments

Clicking the URL associated with the **Experiments** (first option listed) will bring up a complete list of experiments that are accessible to the users, the users' own experiments plus publicly accessible experiments. (For more information on public visibility, refer to caArray 043 - Manage the Public Visibility of a caArray Experiment, Manage the public visibility of a caArray experiment.

Users may sort the experiment list by Experiment ID, Experiment Title, Organism or Updated, by clicking on the column title.

Experiment List

Experin	nents (18)						
18 items fou	und, displaying all iter	ns.					
Experiment D	Experiment Title	Assay Type	Primary Contact	<u>Organism</u>	Condition/Disease State	Samples	Updated
l <u>i-00007</u>	My first caArray Experiment	Gene Expression	Li 🖂	Homo sapiens	Serous Cvstadenocarcinoma	1	7/13/2009

Browsing by the Organisms

Drawoo hur "Experimente"

Clicking the URL associated with the **Organism** (second option in the list) will bring up a page listing as tabs all organisms that are found among the caArray's available experiments. The count of experiments available within each organism also appears on the tab. Click the tab for each organism to see detailed information on the experiments for that organism.

Organisms List

Bos taurus (1) Drosophila melanogaster (1)		Homo sapiens (120)		Mus musculus (24)		Rattus norvegicus (1	Rattus	Rattus rattus (1)	
ne item found									
me nem round									
	Experiment little	Assay	Туре	Primary Cor	tact <u>Organis</u>	m	Condition/Disease State	Samples	Updated

Browsing by the Array Providers

Both the array providers and corresponding number links open the Browse by **Array Providers** page (third option in the list). An array provider is generally the company or group that manufactured the array design used in the experiment. The page is organized alphabetically by tabs that correspond to different array manufacturer's names, with a list of related experiments. The count of experiments available within each Array Provider also appears on the tab. Click the corresponding tab to view detailed information on the experiments for each Array Provider.

Array Providers List

Affymetr	metrix (113) Agilent (9		t (9) Ge	nePix (13)	Illumina (6) ScanArray (3)		ray (3)	UCSF Spot (4)		
113 items for	und, displayi	ng 1 to 20). [First/Prev] 1	, <u>2, 3, 4, 5, 6[</u>]	lext/Last]					
Experiment	Experiment	<u>Title</u>	Assay Type	Primary Contact	<u>Organism</u>	Condition/Dise	ase State			Sam
abate-00279	Activator pr	otein-1	Gene	abate-shen	Homo	primary prostate cancer with detectable metastatic lesions ,				<u>26</u>

Browsing by the Array Designs

An array design is a file that explains the design of an array. This includes such information as the array layout and design, its substrate, surface type, attachment type, the array strand type and the coordinates of each gene on the array.

Both the array providers and corresponding number links open the Browse by **Array Designs** page (fourth option in the list). The page is organized alphabetically by tabs that correspond to different array designs, with a list of related experiments. The count of experiments available within each Array Design also appears on the tab. Click the corresponding tab to display detailed information on the experiments for each Array Design.

Array Designs List

Browse by: "Unique Array Designs" 4

ĸ	AgilentG4502A_07_2 (1) GenomeWi		GenomeWideSI	IP_6 (2) GP_KKWONG UniGem 10K (1)			K(1) IIG-U1	IIG-U133_Plus_2 (19)		(25)	G-U133A_	£.
Or	ne item found	1		761								
E	xoorimort ID	Experiment Title		Аззау Тур	ic i	Primary Contact	Organism	Condition/Disease St	tate	Samples	<u>Updates</u>	1
Lu	pal-00211	Gene Expression	r Anelysis of TC	Gene Expri	essior		Homo sapiens	Serous cystadenoca	arcinoma	39	3/3/2009	1

Search caArray Repository

In caArray, any user can search the repository for the experiments, a feature that can be launched either before login by any user or after login by a registered user. A non-logged in user can view only public data. A logged in user can view public data and non-public data for which the user has permissions.

Search by a public user

For non logged-in users, the Search caArray section is located on the lower portion of the caArray homepage.

Browse and Search caArray User Interfaces

owse caArray		Search caArray
Location		Search: @comparimente Ocempt
(All Locations)	×	Szexperiments O sample
Experiments	22	Category: Experiment Title
		Keyword:
<u>Organisms</u>	2	
Array Providers	1	Location: (All Locations) 💌
<u>Unique Array Designs</u>	5	Search
Hybridizations	59	
Registered Users	18	

Search by a logged in user

For logged-in users, the Search caArray section is located on the upper right corner of the page.

Search caArray Interface for Logged in Users

Please Select	Search
Build CAARRAY_R2_3_0_1_GA Node: NCICB Welcome, flir	n <u>Loqout</u>

Keyword and category are required for the search

To perform a search, the user must enter a keyword and then pick up a category under either the option **Experiments** or the option **Samples**. An inappropriate selected category will fail to return a valid experiment.

Search caArray Interface with Experiments and Samples Expanded

Search caAr	ray	2 Search caArr	ch caArray			
Search	• • Experiments OSamples	、 Search:	OExperiments Samples			
Category	Experiment Title	Category:	Sample Name			
Keyword	Experiment Title Experiment Id Experiment Description	Keyword:	Sample Name Sample External Id			
Location	Array Provider Array Design	Location:	Tissue Site Organism			
	Organism Sample Name Condition/Disease State		Experiment Title Material Type			
	(All Categories)		Source Provider (Other Characteristics)			

Once the user finds the information being sought, the user can open/edit/extract the permissible experiment.

An example of caArray search

The illustration below shows an example of performing a search by the Experiments option and the Experiment id category.

Experiments Option with Experiments id Category Selected

Search caArray	Results for: "li-00035"									
Search: Experiments 	Experin	nents (1)								
Category: Experiment Id	One item found.									
Keyword: li-00035	Experiment ID	<u>Experiment</u> <u>Title</u>	Assay Type	Primary Contact	<u>Organism</u>	Condition/Disease State	Samples	Updated		
Location: (All Locations)	<u>li-00035</u>	Oleg	Gene Expression	Li 🖂	Homo sapiens		1	10/27/2009		
Search										

Have a comment?

Please leave your comment in the caArray End User Forum.