# **BBMRI-ERIC** DIRECTORY USER MANUAL

## INTRODUCTION

The Directory provides a central listing of biobanks and their collections in the BBMRI-ERIC member states. For researchers, the Directory offers a means of finding samples and data, while for biobanks it offers a platform to share the existence of their holdings and services and to connect with researchers interested in them.

The Directory (Holub 2016) is one of the services offered by BBMRI-ERIC Common Services for IT (CS-IT) to the global biobank community and was created in collaboration with the BBMRI National Nodes and partners.

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		View biobank	View biobank	View biobank				
		1 collection available	1 collection available	1 collection available				
		- Arrhythmia genetics in the Netherlands	Ability to collect COVID-19 cases	AMC Renal Transplant Biobank				
		ARC-Net	📑 ARGOS Biobank	ARREST Biobank				
		View biobank	View biobank	View biobank				
		1 collection available	1 collection available	1 collection available				

Figure 1- Directory Landing Page

## TERMINOLOGY

In the Directory and in this document, we make a distinction between a biobank as an organisation and the collections of a biobank. Where we use the term "biobank", we are referring to the organisation, and where we use the term "collection", we are referring to the samples and data held by the biobank. These definitions of "biobank" and "collection" are in line with the MIABIS 2.0 Core community standard (Merino-Martinez 2016).

#### NAVIGATING THE DIRECTORY

#### **Overview**

The Directory is a broad catalogue of biobanks with their samples and data at the collection level. You can browse and filter by country, sample type, quality marks and more.

In the directory, you can see the cards (1). Each card represents a biobank. On a biobank's card, you can see information about the biobank and a list of its available collections.

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		ARC-Net	📑 ARGOS Biobank	Biobank 🗮 ARREST Biobank						
		View biobank	View biobank	View biobank						
		1 collection available	1 collection available	1 collection available						

Figure 2- The biobanks represented as cards

#### Search for a Biobank/Collection or Sample

You can use the search option (2). In the search bar, you can search for your desired biobank, by searching for the biobank name, collection name, or the diagnosis. For example, you can type Graz, if you are looking for the Graz biobank. You can see that the result shows you the Biobank Graz card.



Figure 3- The search bar and the filters

Or you can use the filters (2) to narrow down the results. For example, you can filter by diagnosis or a specific country. You can filter material type, or search for biobanks with a specific quality label. For example, if you were interested in seeing all biobanks with birth cohort collections, you would navigate to "Collection Types" and check the box for "Birth cohort", and then on the right a table with biobanks with birth cohort collections would appear.

On the left top corner (4) you can see the number of results specified by the number of organizations, number of collections and subcollections.

If you are not interested in the filters, or you would like to search for different collections, you can click on "Clear all filters" (5) to reset all the filters.



Figure 4- Displaying the number of results specified by the number of organisations, number of collections and subcollections and "Clear all filters" options.

#### **The Biobank Cards**

Each card represents a biobank. On a biobank's card, you can see a list of available collections. If there are several collections available on this card, you can see them by scrolling down inside the card.

Amsterdam UMC Biobank: Location AMC								
View biobank								
76 collections available								
A Phase 1 Clinical Trial to Evaluate the Safety and Immunogenicity of Recombinant HIV-1 Envelope Protein ConM SOSIP.v7 gp140 Vaccine, Adjuvanted with MPLA Liposomes, in Healthy, HIV-Uninfected Adults More details								
Ablation of duodenal mucosa (DMR: Duodenal Mucosal Resurfacing), liraglutide and lifestvle improvement as treatment of Diabetes		Ŧ						

Figure 5- Example of a biobank card

By clicking on the link "View Biobank details" (5), you can flip the card and access more information about the Biobank, such as Collection types, Juridical person, and biobank capabilities. If you need more details about the biobank, you can always click on "More details" (6) to go to the Biobank page. You can flip the biobank card back to view the collections again.



Figure 6- Front side and back side of a biobank card displaying information regarding the biobank and its collections.

You may flip the Card back to view the collections by clicking on "View biobank collections" (7). You can also view more details about each collection of the biobank by clicking on "More details" (8). This will open the collections page.

#### **Biobank/Collection Quality Label**

In some biobank cards you may see a green icon (9) which indicates whether the biobank has a quality label. By hovering over it you can see the quality label type. Also, the quality label of each collection is specified in its specifications. When you hover over the blue question mark (10) you can see the quality label type of the collection.



Figure 7- Biobank and collection quality label icon and information.

To see more detailed information on a specific biobank, click the name of the biobank at the top of the card and you will be taken to a page with additional information on the biobank. For more information on a collection, click on the collection name and you will be taken to a page with additional information on the collection. To go back to the search page, click "Back to the catalogue" at the top of the page.

#### The top menu

All Directory pages are directly accessible from the navigation bar at the top of each page.

Home	Advanced search -	Background	Map of Biobanks	Privacy Statement	Manuals	Code Lists •	Data Integ	ration •			Help	Sign in
	Search Diagnosis available → Count		Collection type	Categories 🔻	ories 🔻 Material type 🖜 Biobank services 💌 Quality labels 💌 Network 💌		Request 0 Data type 👻					
	Search results Organisations: 414 Collection(s): 1427 Subcollection(s): 1099			« < 1	2 3 4	> >						

Figure 8- Navigation bar located at the top of each page

### Navigation bar items:

- **BBMRI-ERIC logo or "Home"** on the left of the navigation bar will take you to the Directory landing page.
- **"Advanced search"** provides direct access to the Directory database and the ability to search for specific collections instead of biobanks as on the homepage.
- "Background" gives a short description of the Directory and its target audience.
- "Map of Biobanks" shows all locations of biobanks on a map of Europe.
- **"Privacy Statement"** discloses the way data is gathered when the Directory is visited and provides other important details about your privacy related to your use of the Directory.
- "References" provides access to documents related to the Directory.
- "Manuals" provides access to the Directory User Manual and Data Managers Manual documents.
- "Code Lists" provides access to the Directory using code lists to specify the acceptable options where there is a limited choice.
- "Data Integration" provides access to the navigator to make the tables visible
- "Sign in" is for the use of Directory administrators and data managers only.

## **Request Cart**

When you find the collections you are interested in, you can proceed to request them. You can select a collection by checking the box next to the collection name (11). You can also select several collections by checking the top box (12). At any time, you can have an overview of the selected collections on the request cart by clicking on the Request button (13) in the top right corner.

Since the Directory contains thousands of collections you might first need to limit the results by searching for relevant terms. For example, if you were looking for a specific disease you could use the Diagnosis filter and select the specific ICD-10 diagnosis code to limit the results to biobanks that have indicated that they have samples related to that diagnosis.

BBMRI-ERIC* Home	Advanced	search • Background Map of Biobanks Privacy Sta	tement Manuals Code Lists • Data Integration •	Admin +	Help Sign in				
	Search Diagno Avail								
		ALLBIO INTERNATIONAL View blobank 1 collection available	Acutelines View biobank 1 collection available	Amsterdam UMC Biobank: Location AMC View biobank 46 collections available					
		Ability to collect COVID-19 cases  Because you searched for:  More details	AcuteLines  Available: 3500 samples  Because you searched for: 1000  More citals	A Phase 1 Clinical Trial to Evaluate the Safety and Immunogenicity of Recombinant HIV-1 Envelope Protein ConM SOS(Pv7 gp140 Vacrine, Adjuvanted with MPLA Liposomes, in Healthy, HIV-Uninfected Adults Because you searched for:					
		Amsterdam UMC, Location VUmc	🗮 Andis – Alla Nya Diabetiker I Skåne	Arctic Biobank - University of Oulu					
		View biobank	View biobank	View biobank					
		1 collection available	1 collection available	4 collections available					

Figure 9- Adding collections to the Request Cart

## **USING THE NEGOTIATOR**

The "Negotiator" function enables a researcher interested in specific samples or data to start a conversation with one or more biobanks, during which he/she can refine the query and eventually request samples or data. To start a conversation, click the "Request" button (13) at the top of the screen showing your search results. View your selected collections one more time, and if you are happy with your selection you can proceed by clicking on the "Send to the Negotiator" button which will redirect you to the negotiator to fill out a request form.

## **FINAL NOTE**

BBMRI-ERIC encourages all biobanks in member states to register in the Directory. Please contact the BBMRI-ERIC helpdesk with any questions, at directory@helpdesk.bbmri-eric.eu.

#### REFERENCES

- Merino-Martinez Roxana, Norlin Loreana, van Enckevort David, Anton Gabriele, Schuffenhauer Simone, Silander Kaisa, Mook Linda, Holub Petr, Bild Raffael, Swertz Morris, and Litton Jan- Eric. Biopreservation and Biobanking. August 2016, 14(4): 298-306. https://doi.org/10.1089/bio.2015.0070
- Holub Petr, Swertz Morris, Reihs Robert, van Enckevort David, Müller Heimo, and Litton Jan-Eric. Biopreservation and Biobanking. December 2016, 14(6): 559-562. https://doi.org/10.1089/bio.2016.0088