# Package 'integrationUser'

March 24, 2021

<b>Version</b> 1.36.0-1
API version v0.1
Description This is the API for layer 4 of the Roche pRed project. This swagger page describes the integrationUser APIs. These are typically used to find and retrieve study, sample and processed (signal) data and metadata for a given query. Before carrying out any API calls you will need an API token. API tokens can be obtained under your profile within the Genestack software. Further instructions can be found [here](https://odm-user-guide.readthedocs.io/en/latest/doc-odm-user-guide/getting-a-genestack-apitoken.html). To try out calls in this swagger page: 1. Click the 'Authorize' button below to enter your API token 2. Scroll to the 'Parameters' section for the method you wish to try out and click the 'Try it out' button 3. Enter parameter values that you wish to try 4. Scroll to the bottom of the Parameters section and click the 'Execute' bar that appears The server response will be in the section that follows.
<b>Depends</b> R (>= $3.3.2$ )

Depends R (>= 3.3.2 License Proprietary Encoding UTF-8 LazyData true RoxygenNote 7.1.1

Title integrationUser

## **R** topics documented:

ExpressionIntegrationApi_get_expression_by_library	1
ExpressionIntegrationApi_get_expression_by_preparation	
ExpressionIntegrationApi_get_expression_by_sample	3
ExpressionIntegrationApi_get_parents_by_study	
ExpressionIntegrationApi_get_run_to_library_pairs	
ExpressionIntegrationApi_get_run_to_preparation_pairs	
ExpressionIntegrationApi_get_run_to_sample_pairs	
FlowCytometryIntegrationApi_get_flow_cytometry_by_sample	
FlowCytometryIntegrationApi_get_parents_by_study	7
FlowCytometryIntegrationApi_get_run_to_sample_pairs	
LibraryIntegrationApi_get_libraries_by_samples	

ExpressionIntegrationApi\_get\_expression\_by\_library

Retrieve expression run-level data by querying related library ID (accession)

#### **Description**

Retrieve expression run-level data by querying related library ID (accession)

```
ExpressionIntegrationApi_get_expression_by_library(
  id,
  page_limit,
  page_offset,
  use_versions,
  ...
)
```

id	Unique identifier (accession) of the object.
page_limit	Maximum number of results to return. This value must be between 0 and 2000 (inclusive).
page_offset	Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.
use_versions	Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \* or v <version number=""> or <chain_id>:v<version number=""> or <chain_id>:v<version2,></version2,></chain_id></version></chain_id></version>

 ${\tt ExpressionIntegrationApi\_get\_expression\_by\_preparation}$ 

Retrieve expression run-level data by querying related preparation ID (accession)

### Description

Retrieve expression run-level data by querying related preparation ID (accession)

### Usage

```
ExpressionIntegrationApi_get_expression_by_preparation(
  id,
  page_limit,
  page_offset,
  use_versions,
  ...
)
```

### **Arguments**

id	Unique identifier (accession) of the object.
page_limit	Maximum number of results to return. This value must be between 0 and 2000 (inclusive).
page_offset	Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.
use_versions	Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \* or v <version number=""> or <chain_id>:v<version number=""></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version>

```
ExpressionIntegrationApi_get_expression_by_sample

*Retrieve expression run-level data by querying related sample ID (accession)
```

### **Description**

Retrieve expression run-level data by querying related sample ID (accession)

### Usage

```
ExpressionIntegrationApi_get_expression_by_sample(
   id,
   page_limit,
   page_offset,
   use_versions,
   returned_metadata_fields,
   ...
)
```

### **Arguments**

id	Unique identifier (accession) of the object.
page_limit	Maximum number of results to return. This value must be between 0 and 2000 (inclusive).
page_offset	Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.
use_versions	Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \* or v <version number=""> or <chain_id>:v<version number=""></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version>
returned_metada	ata_fields

```
ExpressionIntegrationApi_get_parents_by_study

*Retrieve group metadata by querying study ID (accession)
```

### Description

Retrieve group metadata by querying study ID (accession)

#### Usage

```
ExpressionIntegrationApi_get_parents_by_study(
  id,
  use_versions,
  returned_metadata_fields,
  ...
)
```

#### **Arguments**

id

Unique identifier (accession) of the object.

use\_versions

Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \\* or v<version number> or <CHAIN\_ID>:v<version number> or <CHAIN\_ID>:v<version2,..>

returned\_metadata\_fields

The parameter defines amount of metadata attributes to return: 1. template - return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

ExpressionIntegrationApi\_get\_run\_to\_library\_pairs

Retrieve run-library pairs by group id. Pagination is based on unique runs, not unique pairs.

#### **Description**

Retrieve run-library pairs by group id. Pagination is based on unique runs, not unique pairs.

#### Usage

```
ExpressionIntegrationApi_get_run_to_library_pairs(
  id,
  page_limit,
  page_offset,
  ...
)
```

### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

ExpressionIntegrationApi\_get\_run\_to\_preparation\_pairs

Retrieve run-preparation pairs by group id. Pagination is based on unique runs, not unique pairs.

### **Description**

Retrieve run-preparation pairs by group id. Pagination is based on unique runs, not unique pairs.

### Usage

```
ExpressionIntegrationApi_get_run_to_preparation_pairs(
   id,
   page_limit,
   page_offset,
   ...
)
```

#### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

```
ExpressionIntegrationApi_get_run_to_sample_pairs
```

Retrieve run-sample pairs by group id. Pagination is based on unique runs, not unique pairs.

#### **Description**

Retrieve run-sample pairs by group id. Pagination is based on unique runs, not unique pairs.

### Usage

```
ExpressionIntegrationApi_get_run_to_sample_pairs(
  id,
  page_limit,
  page_offset,
  ...
)
```

#### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

```
FlowCytometryIntegrationApi_get_flow_cytometry_by_sample
```

Retrieve flow cytometry run-level data by querying related sample ID (accession)

### Description

Retrieve flow cytometry run-level data by querying related sample ID (accession)

```
FlowCytometryIntegrationApi_get_flow_cytometry_by_sample(
   id,
   page_limit,
   page_offset,
   use_versions,
   returned_metadata_fields,
   ...
)
```

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

use\_versions Specify which versions of omics data files are used in the query. By default the

active version is used. See Versioning above. Syntax: \\* or v<version number>

or <CHAIN\_ID>:v<version number> or <CHAIN\_ID>:<accession1,accession2,...>

returned\_metadata\_fields

The parameter defines amount of metadata attributes to return: 1. template return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

FlowCytometryIntegrationApi\_get\_parents\_by\_study

Retrieve group metadata by querying study ID (accession)

#### **Description**

Retrieve group metadata by querying study ID (accession)

### Usage

```
FlowCytometryIntegrationApi_get_parents_by_study(
  id,
  use_versions,
  returned_metadata_fields,
  ...
)
```

#### **Arguments**

id Unique identifier (accession) of the object.

use\_versions Specify which versions of omics data files are used in the query. By default the

active version is used. See Versioning above. Syntax: \\* or v<version number>

or<CHAIN\_ID>:v<version number>or<CHAIN\_ID>:<accession1,accession2,..>

returned\_metadata\_fields

```
FlowCytometryIntegrationApi_get_run_to_sample_pairs
```

Retrieve run-sample pairs by group id. Pagination is based on unique runs, not unique pairs.

#### **Description**

Retrieve run-sample pairs by group id. Pagination is based on unique runs, not unique pairs.

### Usage

```
FlowCytometryIntegrationApi_get_run_to_sample_pairs(
   id,
   page_limit,
   page_offset,
   ...
)
```

#### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

```
LibraryIntegrationApi_get_libraries_by_samples

*Retrieve library metadata by querying related samples*
```

### Description

Retrieve library metadata by querying related samples

```
LibraryIntegrationApi_get_libraries_by_samples(
    filter,
    query,
    search_specific_terms,
    page_limit,
    page_offset,
    returned_metadata_fields,
    ...
)
```

filter Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"

query Search for objects via a full-text query over all sample metadata fields. E.g.

Clozapine

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

returned\_metadata\_fields

The parameter defines amount of metadata attributes to return: 1. template - return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

LibraryIntegrationApi\_get\_library\_by\_sample

Retrieve library metadata by querying related sample ID (accession)

#### Description

Retrieve library metadata by querying related sample ID (accession)

#### Usage

LibraryIntegrationApi\_get\_library\_by\_sample(id, returned\_metadata\_fields, ...)

### Arguments

id Unique identifier (accession) of the object.

returned\_metadata\_fields

```
LibraryIntegrationApi_get_library_links_to_samples
```

Retrieve library-samples pairs by group id. Pagination is based on unique libraries, not unique pairs.

### Description

Retrieve library-samples pairs by group id. Pagination is based on unique libraries, not unique pairs.

#### Usage

```
LibraryIntegrationApi_get_library_links_to_samples(
   id,
   page_limit,
   page_offset,
   ...
)
```

#### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

```
LibraryIntegrationApi_get_parents_by_study

Retrieve group metadata by querying study ID (accession)
```

#### **Description**

Retrieve group metadata by querying study ID (accession)

### Usage

```
LibraryIntegrationApi_get_parents_by_study(id, ...)
```

### **Arguments**

id Unique identifier (accession) of the object.

```
LinkageApi_get_data_types
```

Lists all available data types.

### Description

Lists all available data types.

### Usage

```
LinkageApi_get_data_types(...)
```

```
LinkageApi_get_data_types_links
```

List all possible links between data types that match the specified criteria.

### **Description**

List all possible links between data types that match the specified criteria.

#### Usage

```
LinkageApi_get_data_types_links(type, ...)
```

### Arguments

type

Return only links with the specified data type.

```
LinkageApi_get_links_by_ids
```

Finds existing links by passing many IDs. Pagination goes through all links matched the criteria.

### **Description**

Finds existing links by passing many IDs. Pagination goes through all links matched the criteria.

### Usage

```
LinkageApi_get_links_by_ids(request, ...)
```

### **Arguments**

request

```
LinkageApi_get_links_by_params
```

Finds existing links matching the specified criteria.

### Description

Finds existing links matching the specified criteria.

### Usage

```
LinkageApi_get_links_by_params(
  first_id,
  first_type,
  second_id,
  second_type,
  offset,
  limit,
  ...
)
```

### Arguments

```
first_id Object ID (accession) (e.g. accession of study)

first_type Type of the object (e.g. study)

second_id Object ID (accession) (e.g. accession of study)

second_type Type of the object (e.g. study)

offset Param says to skip that many links before beginning to return links.

limit Param says to limit the count of returned links.
```

```
OmicsQueriesApi_search_expression_data
```

Retrieve expression data objects by searching across multiple data types

### **Description**

Retrieve expression data objects by searching across multiple data types

#### Usage

```
OmicsQueriesApi_search_expression_data(
  study_filter,
  study_query,
  sample_filter,
  sample_query,
  search_specific_terms,
  vx_query,
  vx_filter,
  ex_query,
  ex_filter,
  fx_query,
  fx_filter,
  use_versions,
  cursor,
  page_limit,
)
```

#### **Arguments**

Filter by study metadata (key-value metadata pair(s)). E.g. "Study Source"=ArrayExpress study\_filter Search for objects via a full-text query over all study metadata fields. E.g. study\_query "RNA-Seq of human dendritic cells" Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens" sample\_filter Search for objects via a full-text query over all sample metadata fields. E.g. sample\_query Clozapine search\_specific\_terms If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

Search for objects linked to variant data via data query (key-value pair(s)). E.g. vx\_query

VariationId=rs548419688|rs544419019 Intervals=12:23432-234324,30:234324-23432

Gene=ASPM,BRCA1 Reference=A|T Alteration=C|GQuality=(0.9:1.0) Type=SNP|MNP|INS|DEL|MI

info\_VT=DEL info\_EUR\_AF=(0.9:1.0) Start=12340 AllelesNumber=1 AlterationNumber=2

Filter by variant metadata (key-value metadata pair(s)). E.g. "Variant Source"=dbSNP vx\_filter

ex\_query Search for objects linked to expression data via data query (key-value pair(s)).

E.g. Feature=ENSG00000230368, ENSG00000188976 MinValue=1.50

ex\_filter Filter by expression metadata (key-value metadata pair(s)). E.g. "Genome Version"=hg19-BROAD

fx\_query Search for objects linked to flow cytometry data via data query (key-value pair(s)).

E.g. ReadoutType=Median|CountCellPopulation="CD45+, live"MinValue=3.5

fx\_filter Filter by flow cytometry metadata (key-value metadata pair(s)). E.g. Organ=blood use\_versions Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \\* or v<version number> or <CHAIN\_ID>:v<version number> or <CHAIN\_ID>:<accession1, accession2,..> cursor The page tag to resume results from (see paging above).

page\_limit How many results to retrieve per page. The default is 2000

OmicsQueriesApi\_search\_expression\_groups

Retrieve group objects by searching across multiple data types

#### **Description**

Retrieve group objects by searching across multiple data types

#### Usage

```
OmicsQueriesApi_search_expression_groups(
  study_filter,
  study_query,
  sample_filter,
  sample_query,
  search_specific_terms,
  vx_query,
  vx_filter,
  ex_query,
  ex_filter,
  fx_query,
  fx_filter,
  use_versions,
  cursor,
  page_limit,
)
```

#### **Arguments**

study\_filter Filter by study metadata (key-value metadata pair(s)). E.g. "Study Source"=ArrayExpress
study\_query Search for objects via a full-text query over all study metadata fields. E.g.
"RNA-Seq of human dendritic cells"
sample\_filter Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"
sample\_query Search for objects via a full-text query over all sample metadata fields. E.g.
Clozapine

```
search_specific_terms
                    If the full-text query term is present in an RTS dictionary, enabling this param-
                   eter will modify the query to include child terms of the full-text query. For
                   example, the search query "Body fluid" can be expanded to include the term
                    "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or
                    "Blood" in their metadata will be returned in the search results. The parent-child
                    relationship is defined by the key "broaders" in the dictionary. If the full query
                    term is not present in a dictionary then this parameter has no effect.
                    Search for objects linked to variant data via data query (key-value pair(s)). E.g.
 vx_query
                    VariationId=rs548419688|rs544419019 Intervals=12:23432-234324,30:234324-23432
                    Gene=ASPM,BRCA1 Reference=A|T Alteration=C|GQuality=(0.9:1.0) Type=SNP|MNP|INS|DEL|MI
                    info_VT=DEL info_EUR_AF=(0.9:1.0) Start=12340 AllelesNumber=1 AlterationNumber=2
 vx_filter
                   Filter by variant metadata (key-value metadata pair(s)). E.g. "Variant Source"=dbSNP
                   Search for objects linked to expression data via data query (key-value pair(s)).
 ex_query
                    E.g. Feature=ENSG00000230368, ENSG00000188976 MinValue=1.50
 ex_filter
                   Filter by expression metadata (key-value metadata pair(s)). E.g. "Genome Version"=hg19-BROAD
 fx_query
                    Search for objects linked to flow cytometry data via data query (key-value pair(s)).
                   E.g. ReadoutType=Median|CountCellPopulation="CD45+, live"MinValue=3.5
 fx_filter
                   Filter by flow cytometry metadata (key-value metadata pair(s)). E.g. Organ=blood
 use_versions
                    Specify which versions of omics data files are used in the query. By default the
                    active version is used. See Versioning above. Syntax: \* or v<version number>
                    or <CHAIN_ID>:v<version number> or <CHAIN_ID>:<accession1,accession2,...>
 cursor
                   The page tag to resume results from (see paging above).
                   How many results to retrieve per page. The default is 2000
 page_limit
OmicsQueriesApi_search_flow_cytometry_data
```

Retrieve flow cytometry data objects by searching across multiple data

#### **Description**

Retrieve flow cytometry data objects by searching across multiple data types

### Usage

```
OmicsQueriesApi_search_flow_cytometry_data(
   study_filter,
   study_query,
   sample_filter,
   sample_query,
   search_specific_terms,
   vx_query,
   vx_filter,
```

types

```
ex_query,
ex_filter,
fx_query,
fx_filter,
use_versions,
page_offset,
cursor,
page_limit,
...
)
```

 $study\_filter \qquad Filter \ by \ study \ metadata \ (key-value \ metadata \ pair(s)). \ E.g. \ "Study \ Source" = Array Express$ 

study\_query Search for objects via a full-text query over all study metadata fields. E.g.

"RNA-Seq of human dendritic cells"

sample\_filter Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"

sample\_query Search for objects via a full-text query over all sample metadata fields. E.g.

Clozapine

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query

term is not present in a dictionary then this parameter has no effect.

vx\_query Search for objects linked to variant data via data query (key-value pair(s)). E.g.

VariationId=rs548419688|rs544419019 Intervals=12:23432-234324,30:234324-23432

info\_VT=DEL info\_EUR\_AF=(0.9:1.0) Start=12340 AllelesNumber=1 AlterationNumber=2

vx\_filter Filter by variant metadata (key-value metadata pair(s)). E.g. "Variant Source"=dbSNP

ex\_query Search for objects linked to expression data via data query (key-value pair(s)).

E.g. Feature=ENSG00000230368, ENSG00000188976 MinValue=1.50

ex\_filter Filter by expression metadata (key-value metadata pair(s)). E.g. "Genome Version"=hg19-BROAD

fx\_query Search for objects linked to flow cytometry data via data query (key-value pair(s)).

 $E.g.\ Readout Type = \texttt{Median} \ |\ Count\ Cell Population = "CD45+,\ live"\ MinValue = 3.5$ 

fx\_filter Filter by flow cytometry metadata (key-value metadata pair(s)). E.g. Organ=blood

use\_versions Specify which versions of omics data files are used in the query. By default the

active version is used. See Versioning above. Syntax: \\* or v<version number> or <CHAIN\_ID>:v<version number> or <CHAIN\_ID>:<accession1, accession2, ...>

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

cursor The page tag to resume results from (see paging above).

page\_limit How many results to retrieve per page. The default is 2000

```
OmicsQueriesApi_search_flow_cytometry_groups

*Retrieve group objects by searching across multiple data types
```

### **Description**

Retrieve group objects by searching across multiple data types

### Usage

```
OmicsQueriesApi_search_flow_cytometry_groups(
  study_filter,
  study_query,
  sample_filter,
  sample_query,
  search_specific_terms,
  vx_query,
  vx_filter,
  ex_query,
  ex_filter,
  fx_query,
  fx_filter,
  use_versions,
  cursor,
  page_limit,
)
```

#### **Arguments**

```
study_filter Filter by study metadata (key-value metadata pair(s)). E.g. "Study Source"=ArrayExpress
study_query Search for objects via a full-text query over all study metadata fields. E.g.
"RNA-Seq of human dendritic cells"
sample_filter Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"
sample_query Search for objects via a full-text query over all sample metadata fields. E.g.
Clozapine
search_specific_terms
```

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

vx_query	Search for objects linked to variant data via data query (key-value pair(s)). E.g. VariationId=rs548419688 rs544419019 Intervals=12:23432-234324,30:234324-23432 Gene=ASPM,BRCA1 Reference=A T Alteration=C G Quality=(0.9:1.0) Type=SNP MNP INS DEL MI info_VT=DEL info_EUR_AF=(0.9:1.0) Start=12340 AllelesNumber=1 AlterationNumber=2
vx_filter	Filter by variant metadata (key-value metadata pair(s)). E.g. "Variant Source"=dbSNP
ex_query	Search for objects linked to expression data via data query (key-value pair(s)). E.g. Feature=ENSG00000230368,ENSG00000188976 MinValue=1.50
ex_filter	Filter by expression metadata (key-value metadata pair(s)). E.g. "Genome Version"=hg19-BROAD
fx_query	Search for objects linked to flow cytometry data via data query (key-value pair(s)). E.g. ReadoutType=Median Count CellPopulation="CD45+, live" MinValue=3.5
fx_filter	Filter by flow cytometry metadata (key-value metadata pair(s)). E.g. Organ=blood
use_versions	Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \* or v <version number=""> or <chain_id>:v<version number=""></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version></chain_id></version>
cursor	The page tag to resume results from (see paging above).
page_limit	How many results to retrieve per page. The default is 2000

OmicsQueriesApi\_search\_samples

Retrieve sample metadata objects by searching across multiple data types

### Description

Retrieve sample metadata objects by searching across multiple data types

```
OmicsQueriesApi_search_samples(
  study_filter,
  study_query,
  sample_filter,
  sample_query,
  search_specific_terms,
  vx_query,
  vx_filter,
  ex_query,
  ex_filter,
  fx_query,
  fx_filter,
  use_versions,
  cursor,
 page_limit,
)
```

study_filter	Filter by study metadata (key-value metadata pair(s)). E.g. "Study Source"=ArrayExpress
study_query	Search for objects via a full-text query over all study metadata fields. E.g. "RNA-Seq of human dendritic cells"
sample_filter	Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"
sample_query	Search for objects via a full-text query over all sample metadata fields. E.g. Clozapine
search_specific	
	If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.
vx_query	Search for objects linked to variant data via data query (key-value pair(s)). E.g. VariationId=rs548419688 rs544419019 Intervals=12:23432-234324,30:234324-23432 Gene=ASPM,BRCA1 Reference=A T Alteration=C G Quality=(0.9:1.0) Type=SNP MNP INS DEL MI info_VT=DEL info_EUR_AF=(0.9:1.0) Start=12340 AllelesNumber=1 AlterationNumber=2
vx_filter	Filter by variant metadata (key-value metadata pair(s)). E.g. "Variant Source"=dbSNP
ex_query	Search for objects linked to expression data via data query (key-value pair(s)). E.g. Feature=ENSG00000230368,ENSG00000188976 MinValue=1.50
ex_filter	Filter by expression metadata (key-value metadata pair(s)). E.g. "Genome Version"=hg19-BR0AD
fx_query	Search for objects linked to flow cytometry data via data query (key-value pair(s)). E.g. ReadoutType=Median Count CellPopulation="CD45+, live" MinValue=3.5
fx_filter	Filter by flow cytometry metadata (key-value metadata pair(s)). E.g. Organ=blood
use_versions	Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \* or v <version number=""> or <chain_id>:v<version number=""> or <chain_id>:v<version2,></version2,></chain_id></version></chain_id></version>
cursor	The page tag to resume results from (see paging above).
page_limit	How many results to retrieve per page. The default is 2000

 ${\tt OmicsQueriesApi\_search\_streamed\_expression\_data} \\ Retrieve\ expression\ levels\ streamingly$ 

### Description

Retrieve expression levels streamingly

#### Usage

```
OmicsQueriesApi_search_streamed_expression_data(
  group_accession,
  sample_filter,
  sample_query,
  search_specific_terms,
  feature_list,
  ...
)
```

#### **Arguments**

group\_accession

Accession of the group which contains the reference to the expression matrix

sample\_filter Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"

sample\_query Search for objects via a full-text query over all sample metadata fields. E.g.

Clozapine

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

feature\_list

Filter results by specific feature (eg. Gene identifier). The feature parameter value must match the name of the identifier in the GCT file (under the NAME column). Example: ENSG00000077044

OmicsQueriesApi\_search\_variant\_data

Retrieve variant data objects by searching across multiple data types

#### Description

Retrieve variant data objects by searching across multiple data types

```
OmicsQueriesApi_search_variant_data(
   study_filter,
   study_query,
   sample_filter,
   sample_query,
   search_specific_terms,
```

```
vx_query,
  vx_filter,
  ex_query,
  ex_filter,
  fx_query,
  fx_filter,
  use_versions,
  page_offset,
  cursor,
  page_limit,
)
```

ex\_query

study\_filter Filter by study metadata (key-value metadata pair(s)). E.g. "Study Source"=ArrayExpress Search for objects via a full-text query over all study metadata fields. E.g. study\_query "RNA-Seq of human dendritic cells" Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens" sample\_filter Search for objects via a full-text query over all sample metadata fields. E.g. sample\_query Clozapine search\_specific\_terms If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect. Search for objects linked to variant data via data query (key-value pair(s)). E.g. vx\_query

VariationId=rs548419688|rs544419019 Intervals=12:23432-234324,30:234324-23432

Gene=ASPM,BRCA1 Reference=A|T Alteration=C|GQuality=(0.9:1.0) Type=SNP|MNP|INS|DEL|MI info\_VT=DEL info\_EUR\_AF=(0.9:1.0) Start=12340 AllelesNumber=1 AlterationNumber=2

vx\_filter Filter by variant metadata (key-value metadata pair(s)). E.g. "Variant Source"=dbSNP

> Search for objects linked to expression data via data query (key-value pair(s)). E.g. Feature=ENSG00000230368, ENSG00000188976 MinValue=1.50

ex\_filter Filter by expression metadata (key-value metadata pair(s)). E.g. "Genome Version"=hg19-BROAD

Search for objects linked to flow cytometry data via data query (key-value pair(s)). fx\_query

E.g. ReadoutType=Median|CountCellPopulation="CD45+, live"MinValue=3.5

fx\_filter Filter by flow cytometry metadata (key-value metadata pair(s)). E.g. Organ=blood

use\_versions Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \\* or v<version number> or <CHAIN\_ID>:v<version number> or <CHAIN\_ID>:<accession1, accession2, ..>

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

cursor The page tag to resume results from (see paging above).

page\_limit How many results to retrieve per page. The default is 2000

```
OmicsQueriesApi_search_variant_groups
```

Retrieve group objects by searching across multiple data types

#### **Description**

Retrieve group objects by searching across multiple data types

#### Usage

```
OmicsQueriesApi_search_variant_groups(
  study_filter.
  study_query,
  sample_filter,
  sample_query,
  search_specific_terms,
  vx_query,
  vx_filter,
  ex_query,
  ex_filter,
  fx_query,
  fx_filter,
  use_versions,
  cursor,
  page_limit,
)
```

### Arguments

```
study_filter Filter by study metadata (key-value metadata pair(s)). E.g. "Study Source"=ArrayExpress
study_query Search for objects via a full-text query over all study metadata fields. E.g.
"RNA-Seq of human dendritic cells"
sample_filter Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"
sample_query Search for objects via a full-text query over all sample metadata fields. E.g.
Clozapine
search_specific_terms
```

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

vx_query	Search for objects linked to variant data via data query (key-value pair(s)). E.g. VariationId=rs548419688 rs544419019 Intervals=12:23432-234324,30:234324-23432 Gene=ASPM,BRCA1 Reference=A T Alteration=C G Quality=(0.9:1.0) Type=SNP MNP INS DEL MI info_VT=DEL info_EUR_AF=(0.9:1.0) Start=12340 AllelesNumber=1 AlterationNumber=2
vx_filter	Filter by variant metadata (key-value metadata pair(s)). E.g. "Variant Source"=dbSNP
ex_query	Search for objects linked to expression data via data query (key-value pair(s)). E.g. Feature=ENSG00000230368,ENSG00000188976 MinValue=1.50
ex_filter	Filter by expression metadata (key-value metadata pair(s)). E.g. "Genome Version"=hg19-BROAD
fx_query	Search for objects linked to flow cytometry data via data query (key-value pair(s)). E.g. ReadoutType=Median Count CellPopulation="CD45+, live" MinValue=3.5
fx_filter	Filter by flow cytometry metadata (key-value metadata pair(s)). E.g. Organ=blood
use_versions	Specify which versions of omics data files are used in the query. By default the active version is used. See Versioning above. Syntax: \* or v <version number=""> or <chain_id>:v<version number=""> or <chain_id>:v<version2,></version2,></chain_id></version></chain_id></version>
cursor	The page tag to resume results from (see paging above).
page_limit	How many results to retrieve per page. The default is 2000

PreparationIntegrationApi\_get\_parents\_by\_study

\*Retrieve group metadata by querying study ID (accession)

### Description

Retrieve group metadata by querying study ID (accession)

### Usage

PreparationIntegrationApi\_get\_parents\_by\_study(id, ...)

### Arguments

id Unique identifier (accession) of the object.

PreparationIntegrationApi\_get\_preparations\_by\_samples

\*Retrieve preparation metadata by querying related samples\*

#### **Description**

Retrieve preparation metadata by querying related samples

#### Usage

```
PreparationIntegrationApi_get_preparations_by_samples(
   filter,
   query,
   search_specific_terms,
   page_limit,
   page_offset,
   returned_metadata_fields,
   ...
)
```

#### **Arguments**

filter Filter by sample metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"

query Search for objects via a full-text query over all sample metadata fields. E.g.

Clozapine

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.

returned\_metadata\_fields

PreparationIntegrationApi\_get\_preparation\_by\_sample

Retrieve preparation metadata by querying related sample ID (accession)

#### **Description**

Retrieve preparation metadata by querying related sample ID (accession)

### Usage

```
PreparationIntegrationApi_get_preparation_by_sample(
   id,
    returned_metadata_fields,
    ...
)
```

### **Arguments**

 $\begin{tabular}{ll} \begin{tabular}{ll} I \begin{tabular}{ll} I$ 

The parameter defines amount of metadata attributes to return: 1. template return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

PreparationIntegrationApi\_get\_preparation\_links\_to\_samples

Retrieve run-sample pairs by group id. Pagination is based on unique preparations, not unique pairs.

### Description

Retrieve run-sample pairs by group id. Pagination is based on unique preparations, not unique pairs.

```
PreparationIntegrationApi_get_preparation_links_to_samples(
   id,
   page_limit,
   page_offset,
   ...
)
```

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

SampleIntegrationApi\_get\_samples\_by\_libraries

Retrieve sample metadata by querying related libraries

#### Description

Retrieve sample metadata by querying related libraries

### Usage

```
SampleIntegrationApi_get_samples_by_libraries(
  filter,
  query,
  search_specific_terms,
  page_limit,
  page_offset,
  returned_metadata_fields,
  ...
)
```

#### **Arguments**

filter Filter by library metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo

sapiens"

query Search for objects via a full-text query over all library metadata fields. E.g.

"RNA-Seq of human dendritic cells"

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

returned\_metadata\_fields

The parameter defines amount of metadata attributes to return: 1. template - return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

```
SampleIntegrationApi_get_samples_by_preparations

*Retrieve sample metadata by querying related preparations*
```

#### **Description**

Retrieve sample metadata by querying related preparations

#### Usage

```
SampleIntegrationApi_get_samples_by_preparations(
  filter,
  query,
  search_specific_terms,
  page_limit,
  page_offset,
  returned_metadata_fields,
  ...
)
```

#### **Arguments**

filter Filter by preparation metadata (key-value metadata pair(s)). E.g. "Species or

strain"="Homo sapiens"

query Search for study metadata objects via a full-text query over all preparation meta-

data fields. E.g. "RNA-Seq of human dendritic cells"

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.

page\_offset

```
returned_metadata_fields
```

The parameter defines amount of metadata attributes to return: 1. template - return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

```
SampleIntegrationApi_get_samples_by_study
```

Retrieve sample metadata by querying related study ID (accession)

#### **Description**

Retrieve sample metadata by querying related study ID (accession)

#### Usage

```
SampleIntegrationApi_get_samples_by_study(
   id,
   page_limit,
   page_offset,
   returned_metadata_fields,
   ...
)
```

### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.

returned\_metadata\_fields

```
StudyIntegrationApi_get_studies_by_libraries

*Retrieve study metadata objects by querying related libraries*
```

#### Description

Retrieve study metadata objects by querying related libraries

#### **Usage**

```
StudyIntegrationApi_get_studies_by_libraries(
  filter,
  query,
  search_specific_terms,
  page_limit,
  page_offset,
  returned_metadata_fields,
  ...
)
```

#### **Arguments**

filter

 $Filter\ by\ library\ metadata\ (key-value\ metadata\ pair(s)).\ E.g.\ "Species\ or\ strain"="Homo\ pair(s)")$ 

sapiens"

query

Search for objects via a full-text query over all library metadata fields. E.g.

"RNA-Seq of human dendritic cells"

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

page\_limit

Maximum number of results to return. This value must be between 0 and 2000 (inclusive).

page\_offset

Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.

returned\_metadata\_fields

```
StudyIntegrationApi_get_studies_by_preparations
```

Retrieve study metadata objects by querying related preparations

#### Description

Retrieve study metadata objects by querying related preparations

### Usage

```
StudyIntegrationApi_get_studies_by_preparations(
  filter,
  query,
  search_specific_terms,
  page_limit,
  page_offset,
  returned_metadata_fields,
  ...
)
```

#### **Arguments**

filter

query

Filter by preparation metadata (key-value metadata pair(s)). E.g. "Species or strain"="Homo sapiens"

Search for study metadata objects via a full-text query over all preparation metadata fields. E.g. "RNA-Seq of human dendritic cells"

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

page\_limit

Maximum number of results to return. This value must be between 0 and 2000 (inclusive).

page\_offset

Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.

returned\_metadata\_fields

```
StudyIntegrationApi_get_studies_by_samples
```

Retrieve study metadata objects by querying related samples

#### Description

Retrieve study metadata objects by querying related samples

### Usage

```
StudyIntegrationApi_get_studies_by_samples(
   filter,
   query,
   search_specific_terms,
   page_limit,
   page_offset,
   returned_metadata_fields,
   ...
)
```

#### **Arguments**

filter

 $Filter\ by\ sample\ metadata\ (key-value\ metadata\ pair(s)).\ E.g.\ "Species\ or\ strain"="Homo$ 

sapiens"

query

Search for study metadata objects via a full-text query over all sample metadata fields. E.g. "RNA-Seq of human dendritic cells"

search\_specific\_terms

If the full-text query term is present in an RTS dictionary, enabling this parameter will modify the query to include child terms of the full-text query. For example, the search query "Body fluid" can be expanded to include the term "Blood" (a child term of "Body fluid") so files containing either "Body fluid" or "Blood" in their metadata will be returned in the search results. The parent-child relationship is defined by the key "broaders" in the dictionary. If the full query term is not present in a dictionary then this parameter has no effect.

page\_limit

Maximum number of results to return. This value must be between 0 and 2000 (inclusive).

page\_offset

Show the page pageOffset+1 results from the start of the results. E.g. 100 will show a page of results starting from the 101st result. The default value is 0.

returned\_metadata\_fields

```
StudyIntegrationApi_get_study_by_sample
```

Retrieve study metadata by querying sample ID (accession)

### Description

Retrieve study metadata by querying sample ID (accession)

#### Usage

```
StudyIntegrationApi_get_study_by_sample(id, returned_metadata_fields, ...)
```

### Arguments

id Unique identifier (accession) of the object.

returned\_metadata\_fields

The parameter defines amount of metadata attributes to return: 1. template return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

VariantIntegrationApi\_get\_parents\_by\_study

\*Retrieve group metadata by querying study ID (accession)

### Description

Retrieve group metadata by querying study ID (accession)

```
VariantIntegrationApi_get_parents_by_study(
  id,
  use_versions,
  returned_metadata_fields,
  ...
)
```

id Unique identifier (accession) of the object.

use\_versions Specify which versions of omics data files are used in the query. By default the

active version is used. See Versioning above. Syntax: \\* or v<version number> or <CHAIN\_ID>:v<version number> or <CHAIN\_ID>:<accession1, accession2, ...>

returned\_metadata\_fields

The parameter defines amount of metadata attributes to return: 1. template return metadata attributes according to applied template, if object doesn't have applied template default template will be used. This is the default for User endpoints. 2. all - return all metadata attributes with values and null attributes, if they are present in the applied template. This is the default for Curator endpoints.

VariantIntegrationApi\_get\_run\_to\_sample\_pairs

Retrieve run-sample pairs by group id. Pagination is based on unique runs, not unique pairs.

#### **Description**

Retrieve run-sample pairs by group id. Pagination is based on unique runs, not unique pairs.

#### Usage

VariantIntegrationApi\_get\_run\_to\_sample\_pairs(id, page\_limit, page\_offset, ...)

#### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

VariantIntegrationApi\_get\_variant\_by\_sample

Retrieve variant run-level data by querying related sample ID (accession)

### **Description**

Retrieve variant run-level data by querying related sample ID (accession)

#### **Usage**

```
VariantIntegrationApi_get_variant_by_sample(
   id,
   page_limit,
   page_offset,
   use_versions,
   returned_metadata_fields,
   ...
)
```

#### **Arguments**

id Unique identifier (accession) of the object.

page\_limit Maximum number of results to return. This value must be between 0 and 2000

(inclusive).

page\_offset Show the page pageOffset+1 results from the start of the results. E.g. 100 will

show a page of results starting from the 101st result. The default value is 0.

use\_versions Specify which versions of omics data files are used in the query. By default the

active version is used. See Versioning above. Syntax: \\* or v<version number>

or <CHAIN\_ID>:v<version number> or <CHAIN\_ID>:<accession1, accession2, ..>

returned\_metadata\_fields