# Package 'expressionUser'

March 24, 2021

<b>Version</b> 1.36.0-1	
API version v0.1	
<b>Description</b> This is the API for layer 3 of the Roche pRed project. This swagger page scribes the expressionUser API endpoints for ODM. These are typically used to trieve expression data and metadata. Before carrying out any API calls you will ken. API tokens can be obtained under your profile within the Genestack softwar structions can be found [here](https://odm-user-guide.readthedocs.io/en/latest/doguide/getting-a-genestack-api-token.html). To try out calls in this swag-	find and re- need an API to- re. Further in-

ger 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.

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

Title expressionUser

# R topics documented:

ExpressionSPoTApi_get_expression
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ExpressionSPoTApi\_get\_expression

Retrieve a single expression object by ID (accession)

# Description

Retrieve a single expression object by ID (accession)

#### Usage

```
ExpressionSPoTApi_get_expression(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.

ExpressionSPoTApi\_get\_expression\_by\_version

Retrieve a single expression object by ID (accession)

# Description

Retrieve a single expression object by ID (accession)

### Usage

```
ExpressionSPoTApi_get_expression_by_version(
  id,
  version,
  returned_metadata_fields,
  ...
)
```

#### **Arguments**

id Unique identifier (accession) of the object.

version Unique version 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.

ExpressionSPoTApi\_get\_expression\_data

Retrieve multiple expression data and metadata objects

#### **Description**

Retrieve multiple expression data and metadata objects

#### Usage

```
ExpressionSPoTApi_get_expression_data(
    filter,
    query,
    search_specific_terms,
    run_filter,
    min_expression_level,
    feature_list,
    use_versions,
    returned_metadata_fields,
    page_limit,
    cursor,
    ...
)
```

#### **Arguments**

filter Filter by expression metadata (key-value metadata pair(s)). E.g. "Normalization Method"=TPM.

query Search for expression objects via a full text query over all expression metadata.

E.g. TPM.

search\_specific\_terms

If the full-text query term is present in an ODM 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.

run\_filter

Genestack accession that corresponds to the gct column used to link expression data from the same run to a sample.

min\_expression\_level

Minimum threshold (inclusive) for returned expression values.

feature\_list

List of features to return. These features must match exactly the probe IDs in the GCT file. Example: featureList=1552256\_a\_at&featureList=1552269\_at

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>

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.

page\_limit

Maximum number of results to return per page (see Paging above). This value must be between 0 and 2000 (inclusive). The default is 2000.

cursor

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

ExpressionSPoTApi\_get\_expression\_versions

Retrieve a list of object versions by ID

# **Description**

Retrieve a list of object versions by ID

#### Usage

```
{\tt ExpressionSPoTApi\_get\_expression\_versions(id, \ldots)}
```

#### **Arguments**

id Unique identifier (accession) of the object.

ExpressionSPoTApi\_get\_group

Retrieve a single group object by ID (accession)

#### **Description**

Retrieve a single group object by ID (accession)

#### Usage

```
ExpressionSPoTApi_get_group(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.

ExpressionSPoTApi\_get\_group\_by\_run

Retrieve a single group object by run ID (accession)

# **Description**

Retrieve a single group object by run ID (accession)

#### Usage

```
ExpressionSPoTApi_get_group_by_run(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.

```
ExpressionSPoTApi_search_groups
                         Retrieve groups that match a query
```

#### **Description**

Retrieve groups that match a query

# Usage

```
ExpressionSPoTApi_search_groups(
  filter,
  query,
  search_specific_terms,
  returned_metadata_fields,
  use_versions,
  page_offset,
  page_limit,
)
```

#### **Arguments**

filter Filter by expression metadata (key-value metadata pair(s)). E.g. "Normalization Method"=TPM.

query

Search for expression objects via a full text query over all expression metadata.

E.g. TPM.

search\_specific\_terms

If the full-text query term is present in an ODM 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.

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 end-

points.

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.

page\_limit Maximum number of results to return per page (see Paging above). This value must be between 0 and 2000 (inclusive). The default is 2000.

ExpressionSPoTApi\_search\_runs

Retrieve run objects related to the given group

# Description

Retrieve run objects related to the given group

# Usage

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

#### **Arguments**

id Unique identifier (accession) of the object.

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.

page\_limit Maximum number of results to return per page (see Paging above). This value

must be between 0 and 2000 (inclusive). The default is 2000.