

Package: pubmedR (via r-universe)

October 18, 2024

Title Gathering Metadata About Publications, Grants, Clinical Trials
from 'PubMed' Database

Version 0.0.4

Description A set of tools to extract bibliographic content from
'PubMed' database using 'NCBI' REST API
<<https://www.ncbi.nlm.nih.gov/home/develop/api/>>.

License GPL-3

URL <https://github.com/massimoaria/pubmedR>

BugReports <https://github.com/massimoaria/pubmedR/issues>

Encoding UTF-8

LazyData true

Imports rentrez, XML

Suggests bibliometrix, knitr, rmarkdown

RoxygenNote 7.1.0

VignetteBuilder knitr

Repository <https://massimoaria.r-universe.dev>

RemoteUrl <https://github.com/massimoaria/pubmedr>

RemoteRef HEAD

RemoteSha 3179302b072c4d3d7b1c62756311982334ab7da2

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`pmApi2df`*Convert xml PubMed bibliographic data into a dataframe*

Description

It converts PubMed data, downloaded using Entrez API, into a dataframe

Usage

```
pmApi2df(P, format = "bibliometrix")
```

Arguments

P	is a list following the xml PubMed structure, downloaded using the function <code>pmApiRequest</code> .
format	is a character. If <code>format = "bibliometrix"</code> data will be converted in the bibliometrix compatible data format. If <code>format = "raw"</code> data will save in a dataframe without any other data editing procedure.

Value

a dataframe containing bibliographic records.

To obtain a free access to NCBI API, please visit: <https://www.ncbi.nlm.nih.gov/pmc/tools/developers/>

To obtain more information about how to write a NCBI search query, please visit: <https://pubmed.ncbi.nlm.nih.gov/help/#search-tags>

See Also

[pmApiRequest](#)

[pmQueryTotalCount](#)

Examples

```
# Example: Querying a collection of publications
```

```
query <- "bibliometric*[Title/Abstract] AND english[LA]
        AND Journal Article[PT] AND 2000:2020[DP]"
D <- pmApiRequest(query = query, limit = 100, api_key = NULL)
M <- pmApi2df(D)
```

pmApiRequest	<i>Gather bibliographic content from PubMed database using NCBI entrez APIs</i>
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Description

It gathers metadata about publications from the NCBI PubMed database. The use of NCBI PubMed APIs is entirely free, and doesn't necessary require an API key. The function `pmApiRequest` queries NCBI PubMed using an entrez query formulated through the function `pmQueryBuilder`.

Usage

```
pmApiRequest(query, limit, api_key = NULL)
```

Arguments

<code>query</code>	is a character. It contains a search query formulated using the Entrez query language.
<code>limit</code>	is numeric. It indicates the max number of records to download.
<code>api_key</code>	is a character. It contains a valid api key API keys for the NCBI E-utilities.

Details

Official API documentation is <https://www.ncbi.nlm.nih.gov/books/NBK25500/>.

Value

a list D composed by 5 objects:

<code>data</code>	It is the xml-structured list containing the bibliographic metadata collection downloaded from the P
<code>query</code>	It a character object containing the original query formulated by the user.
<code>query_translation</code>	It a character object containing the query, translated by the NCBI Automatic Terms Translation syst
<code>records_downloaded</code>	It is an integer object indicating the total number of records downloaded and stored in "data".
<code>total_counts</code>	It is an integer object indicating the total number of records matching the query (stored in the "quer

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To obtain more information about how to write a NCBI search query, please visit: <https://pubmed.ncbi.nlm.nih.gov/help/#search-tags>

See Also

[pmQueryTotalCount](#)
[pmApi2df](#)

Examples

```
query <- "bibliometric*[Title/Abstract] AND english[LA]
        AND Journal Article[PT] AND 2000:2020[DP]"
D <- pmApiRequest(query = query, limit = 100, api_key = NULL)
```

pmQueryTotalCount	<i>Count the number of documents returned by a query</i>
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Description

It counts the number of documents that a query returns from the NCBI PubMed database.

Usage

```
pmQueryTotalCount(query, api_key = NULL)
```

Arguments

query	is a character. It contains a search query formulated using the Entrez query language.
api_key	is a character. It contains a valid API keys for the NCBI E-utilities. Default is api_key=NULL The use of NCBI PubMed APIs is entirely free, and doesn't necessary require an API key.

Value

a list. It contains three objects:

n	The total number of records returned by the query
query_translation	The query translation by the NCBI Automatic Terms Translation system
web_history	The web history object. The NCBI provides search history features, which is useful for dealing with large queries.

To obtain a free access to NCBI API, please visit: <https://www.ncbi.nlm.nih.gov/pmc/tools/developers/>

See Also

[pmApiRequest](#)

[pmApi2df](#)

Examples

```
query <- "bibliometric*[Title/Abstract] AND english[LA]  
        AND Journal Article[PT] AND 2000:2020[DP]"  
D <- pmQueryTotalCount(query = query, api_key = NULL)
```

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