USER

PUBGET

A) Format query

- Understand PMC search syntax

B) Format URL

- Understand how to format URLs with the Entrez E-utilities

C) Retrieve nested results in XML

- Sequence URL requests
- Handle network errors
- Time the requests
- Chunk the results

D) Extract flat tabular data and annotation-ready texts

- Parse nested XML
- Account for various XML formats for different journals
- Extract unstructured data with NLP

Topic:
Music fMRI

Query:
"Music[Title] AND (fMRI[Abstract] OR functional magnetic resonance imaging[Abstract])"

URL:

https://eutils.ncbi.nlm.nih.gov/entrez/eutils/esearch.fcgi?db=PMC&term=Music[Abstract]+AND+(fMRI[Abstract]+OR+functional+magnetic+resonance+imaging[Abstract])&usehistory=y

```
<?xml version='1.0' encoding='UTF-8'?>
<article xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:mml="http://www.w3.org/1998/Math/MathML" article-type="systematic-review">
  <?properties open_access?>
  <front>
    <journal-meta>
      <journal-id journal-id-type="nlm-ta">Front Hum Neurosci</journal-id>
      <journal-id journal-id-type="iso-abbrev">Front Hum Neurosci</journal-id>
      <journal-id journal-id-type="publisher-id">Front. Hum. Neurosci.</journal-id>
      <journal-title-group>
        <journal-title>Frontiers in Human Neuroscience</journal-title>
      </journal-title-group>
      <issn pub-type="epub">1662-5161</issn>
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        <publisher-name>Frontiers Media S.A.</publisher-name>
      </publisher>
```

	A	B	C
1	pmcid	pmid	doi
2	10287969	37360179	10.3389/fnins.2023.1180434
3	6560017	31161466	10.1007/s11065-019-09410-x
4	3187762	21998649	10.1371/journal.pone.0025322
5	4810075	27065889	10.3389/fpsyt.2016.00039
6	4769528	26921267	10.1186/s12906-016-1068-2
7	6220503	30443345	10.1186/s40035-018-0134-8
8	6993791	32038473	10.3389/fneur.2020.00018
9	7778730	33065515	10.1016/j.cortex.2020.08.012
10	4009443	24808843	10.3389/fnhum.2014.00228
11	8354020	34394855	10.1080/20008198.2021.1929025
12	9816733	36620169	10.21037/qims-22-133
13	6728376	31488865	10.1038/s41598-019-49239-1
14	9304834	35733239	10.1002/brb3.2646
15	9054752	35488032	10.1038/s41598-022-10710-1
16	6326731	30793072	10.1162/netn_a_00050
17	6029562	29984152	10.1016/j.nicl.2018.05.011
18	8376727	33772347	10.1007/s00234-021-02685-z
19	8388127	34089764	10.1016/j.neubiorev.2021.05.028
20	7745554	33402860	10.1177/1179573520976832
21	8559514	34415078	10.1002/hbm.25635
22	7530292	33192395	10.3389/fnhum.2020.565114