Date: 21-09-21

WEBLEM: 2

National Center for Biotechnology Information (NCBI)

(URL: https://www.ncbi.nlm.nih.gov/)

AIM:

To explore literature databases and collect information on "Scoliosis"

Introduction:

The National Center for Biotechnology Information (NCBI) was created in 1988 as a division of the National Library of Medicine (NLM) at the National Institutes of Health, to develop information systems in the field of molecular biology and bioinformatics. The literature tools developed as a part of NCBI are extensive and thorough as we will see in this weblem.

The query chosen for this Weblem is Scoliosis. Scoliosis is a sideways curvature of the spine that most often is diagnosed in adolescents. This affects about 3 percent of the population, majorly in ages from 10 to 15 and in both genders equally.

Methodology:

- 1. Open Homepage os NCBI database (https://www.ncbi.nlm.nih.gov/)
- 2. Enter search query of Alzheimer's disease by Entrez search.
- 3. Interpret the results by and find the data needed.

Observations:

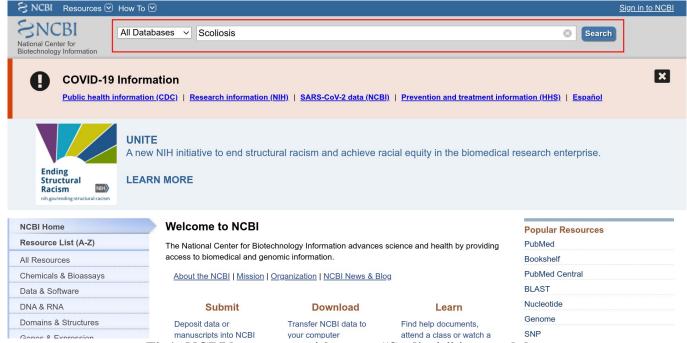


Fig1: NCBI homepage with query "Scoliosis" in search bar

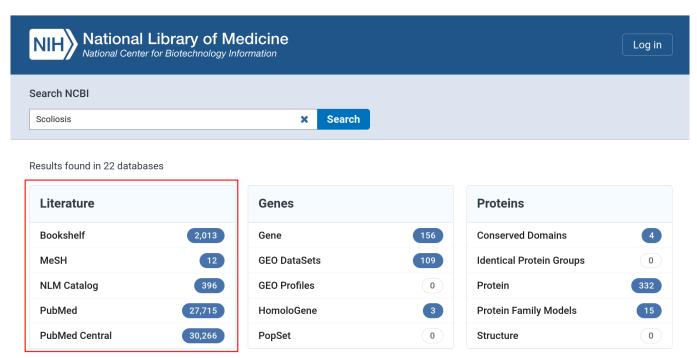
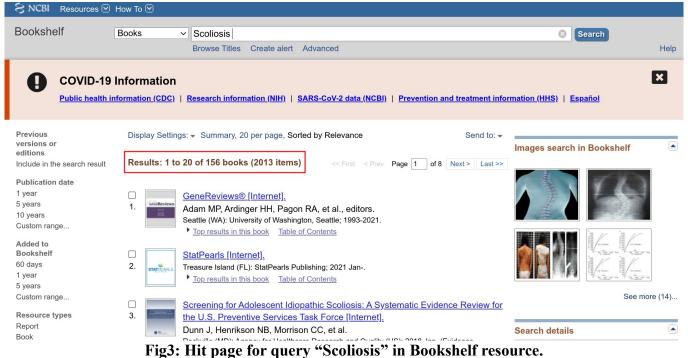


Fig2: Hit page of Entrez search



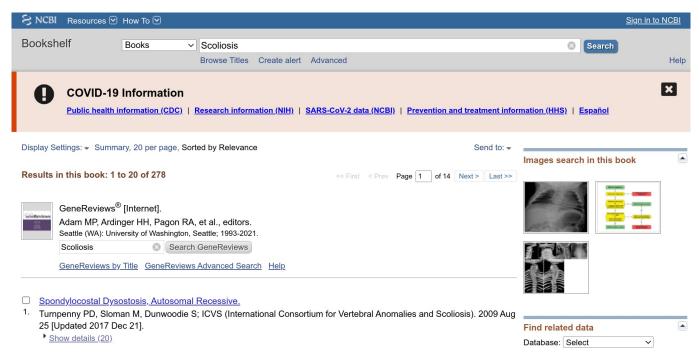


Fig4: Result page for query "Scoliosis" in Bookshelf Resource [Gene Reviews : Adam MP, Ardinger HH, Pagon RA, et al]

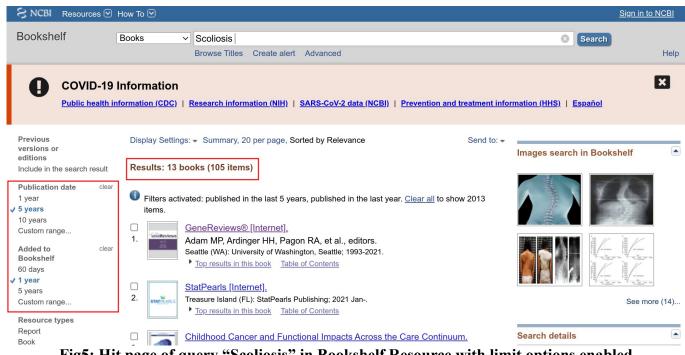


Fig5: Hit page of query "Scoliosis" in Bookshelf Resource with limit options enabled

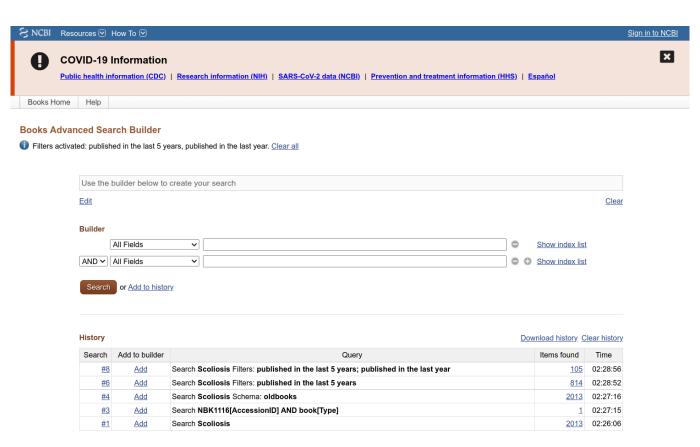
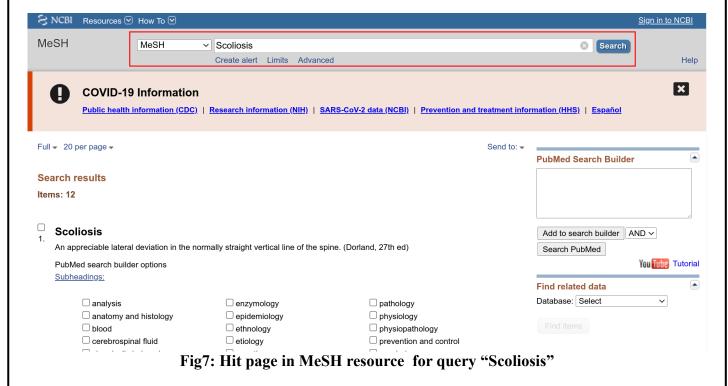
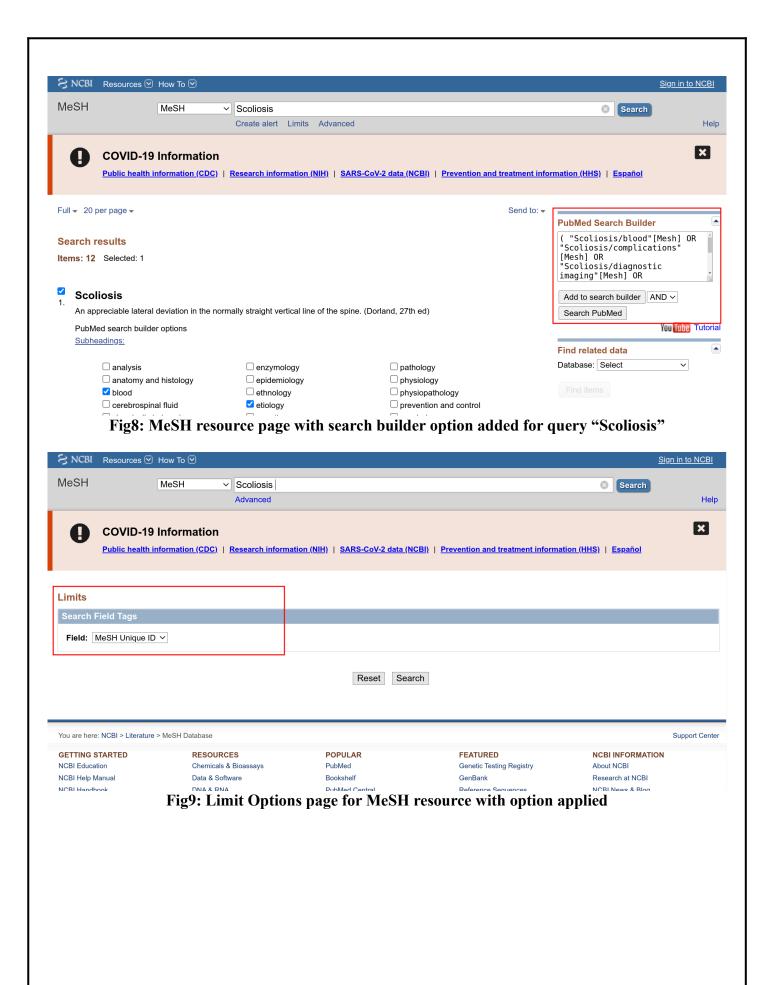


Fig6: Advanced Search building for Bookshelf resource





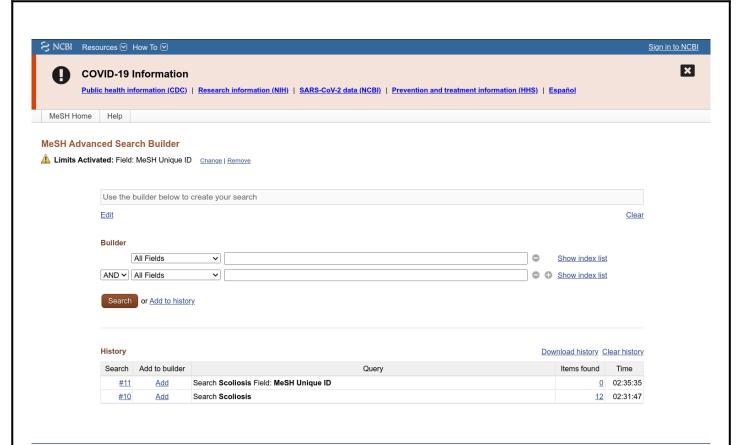


Fig10: Advanced search page for MeSH resource for query "Scoliosis"

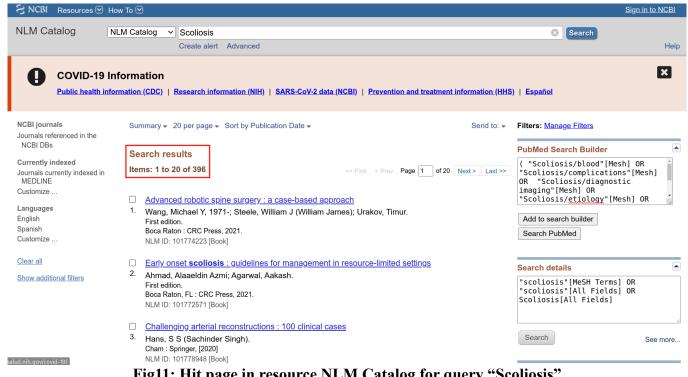


Fig11: Hit page in resource NLM Catalog for query "Scoliosis"

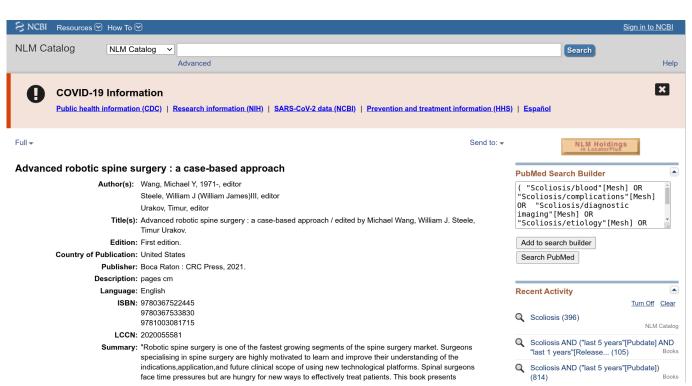


Fig12: Result Page for NLM catalog for query scoliosis [Advanced robotic spine surgery : a case-based approach]

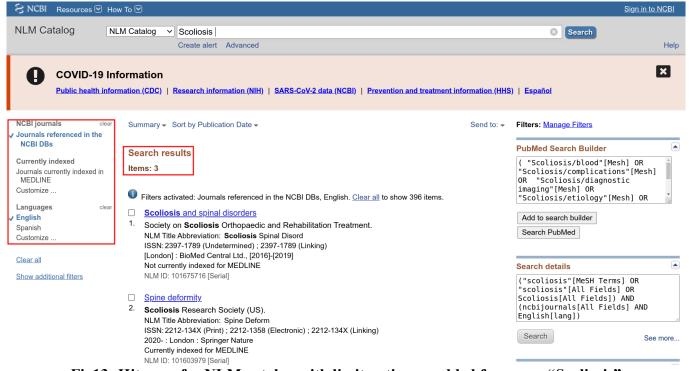
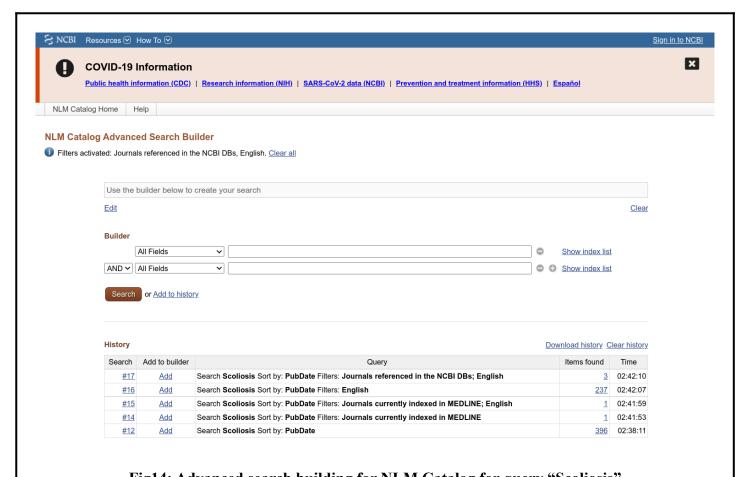
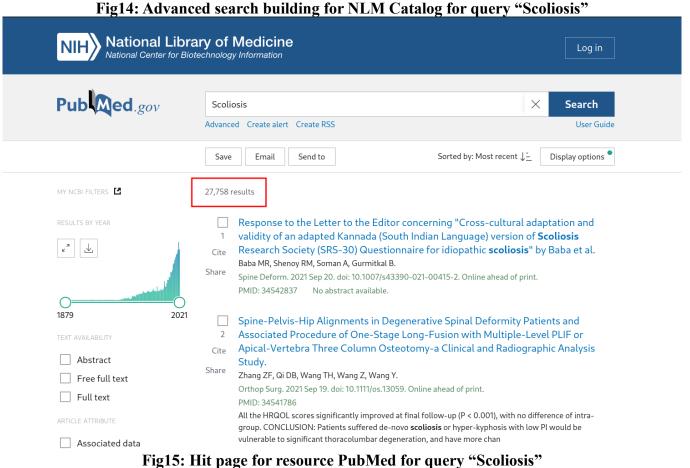


Fig13: Hit page for NLM catalog with limit options enabled for query "Scoliosis"





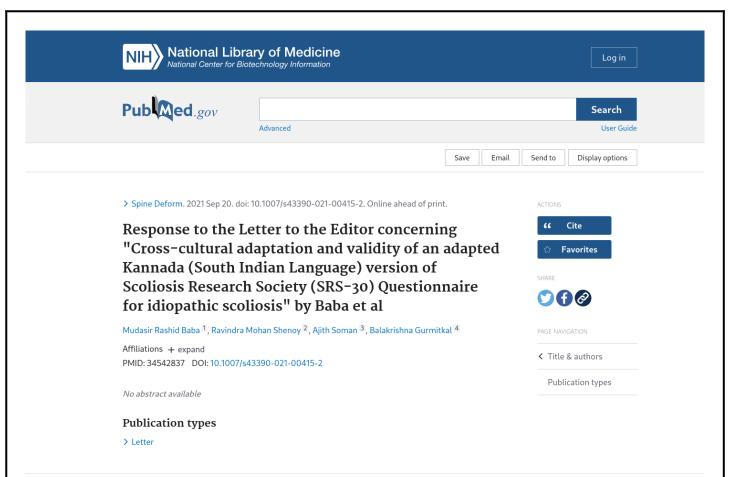
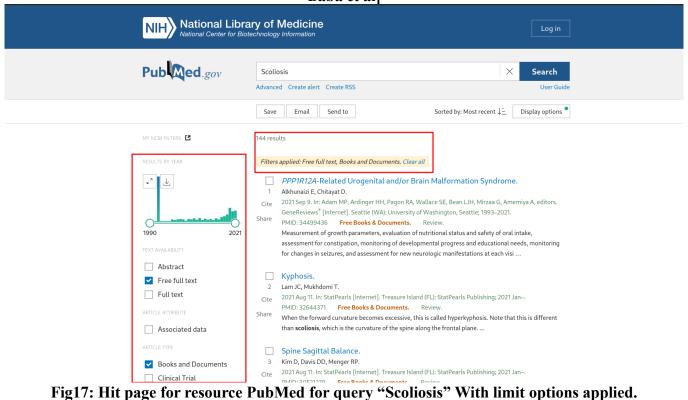


Fig16: Result page for resource PubMed for query "Scoliosis" [Response to the Letter to the Editor concerning "Cross-cultural adaptation and validity of an adapted Kannada (South Indian Language) version of Scoliosis Research Society (SRS-30) Questionnaire for idiopathic scoliosis" by Baba et al



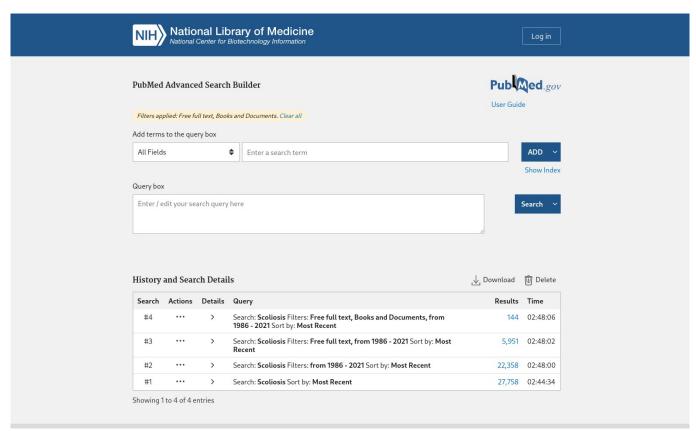


Fig18: Advanced Search builder for Resource PubMed for query "Scoliosis"



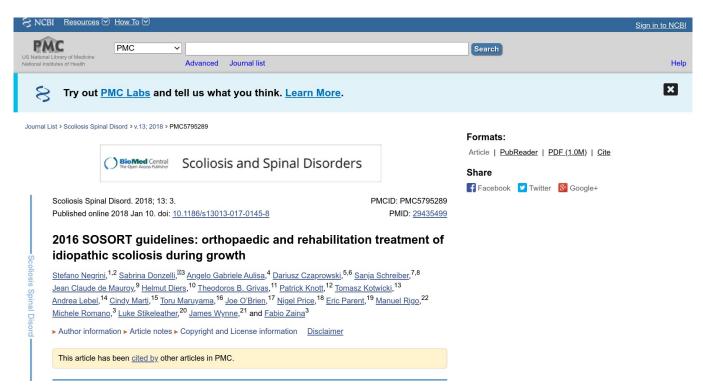


Fig20: Result page for query "Scoliosis" in resource PMC [2016 SOSORT guidelines: orthopaedic and rehabilitation treatment of idiopathic scoliosis during growth]

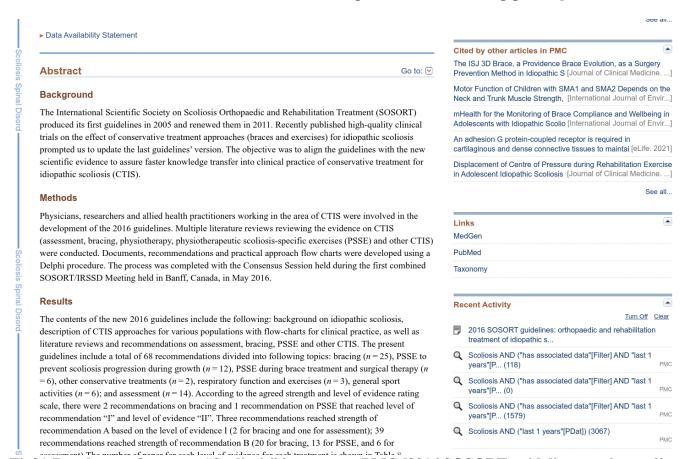


Fig21:Result page for query "Scoliosis" in resource PMC [2016 SOSORT guidelines: orthopaedic and rehabilitation treatment of idiopathic scoliosis during growth]

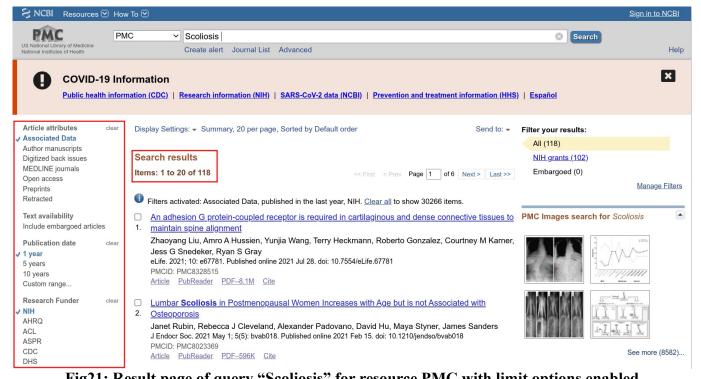


Fig21: Result page of query "Scoliosis" for resource PMC with limit options enabled

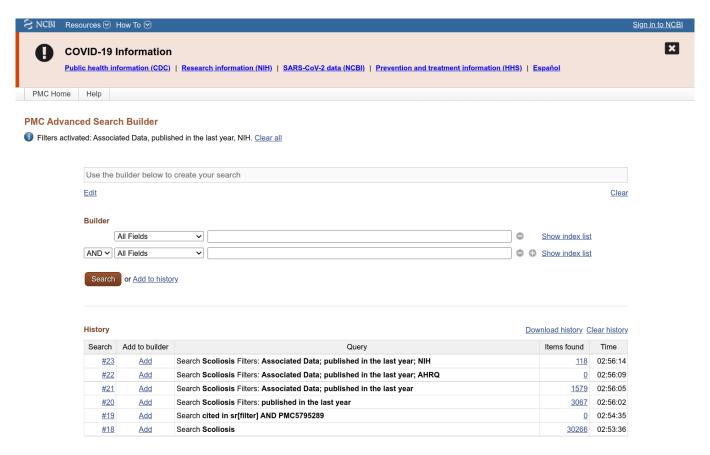


Fig22: Advanced Search builder for resource PMC for query "Scoliosis"

Results:

Sr. No.	Literature Databases	No. of Items
1	Bookshelf	2,013
2	MeSH	12
3	NLM Catalog	396
4	PubMed	27,715
5	PubMed Central	30,226

Conslusion:

The literature tools included in NCBI database are very vast and thorough. They can be efficiently used by students and researchers to gather information about a topic. The Limit filters and advaned search builder, along with MeSH allow us to get hyper specific with the content we want. This is a great set of tools to collect information on any topic relating to Bioinformatics.

References:

1. Bookshelf

- 1. https://www.ncbi.nlm.nih.gov/search/all/?term=Scoliosis
- 2. https://www.ncbi.nlm.nih.gov/books/?term=Scoliosis
- 3. https://www.ncbi.nlm.nih.gov/books/NBK1116/?term=Scoliosis
- 4. https://www.ncbi.nlm.nih.gov/books/advanced

2. MeSH

- 1. https://www.ncbi.nlm.nih.gov/mesh/?term=Scoliosis
- 2. https://www.ncbi.nlm.nih.gov/mesh
- 3. https://www.ncbi.nlm.nih.gov/mesh/limits?term=Scoliosis
- 4. https://www.ncbi.nlm.nih.gov/mesh/advanced

3. NLM Catalog

- 1. https://www.ncbi.nlm.nih.gov/nlmcatalog/?term=Scoliosis
- 2. https://www.ncbi.nlm.nih.gov/nlmcatalog/101774223
- 3. https://www.ncbi.nlm.nih.gov/nlmcatalog
- 4. https://www.ncbi.nlm.nih.gov/nlmcatalog/advanced

4. PubMed

- 1. https://pubmed.ncbi.nlm.nih.gov/?term=Scoliosis&sort=date&ac=yes
- 2. https://pubmed.ncbi.nlm.nih.gov/34542837/
- 3. https://pubmed.ncbi.nlm.nih.gov/? term=Scoliosis&filter=simsearch2.ffrft&filter=pubt.booksdocs&filter=years.1986-2021&sort=date
- 4. https://pubmed.ncbi.nlm.nih.gov/advanced/

5. PMC

- 1. https://www.ncbi.nlm.nih.gov/pmc/?term=Scoliosis
- 2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5795289/
- 3. https://www.ncbi.nlm.nih.gov/pmc/advanced