

RESEARCH TACTICS, TOOLS & TIPS

Information Strategies

Information's Role in the Research Process

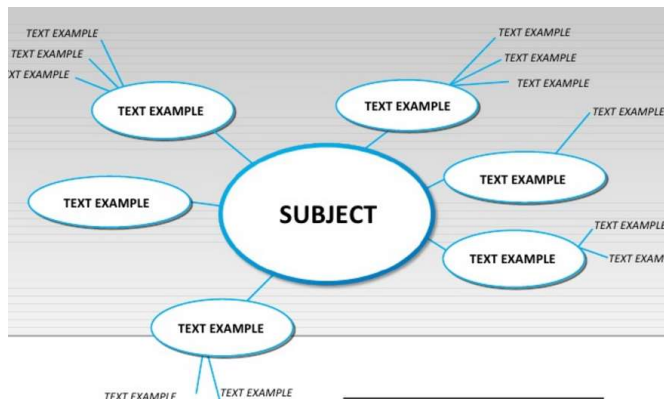
- Information plays a pivotal role in the research process, regardless of the research method or discipline
- Understanding your information needs is an important part of the research process
 - Identification (*What information do I need?*)
 - Seeking (*How do I find/get the information I need? What information resources should I use?*)
 - Assessment (*How do I know I have the information I need? What is its authority/accuracy?*)
 - Comprehension (*How do I make sense of the information I have?*)
 - Synthesizing /Inclusion (*How do I use the information I have?)*

Information Tactics for Research Projects

- Conduct extensive “pre-search”; address your knowledge gap
 - Gain insights into concepts
 - Identify terminologies/terms (keywords/subjects)
 - Resource discovery/assessment (what resources and information technologies might be good to use)
 - Possible refinement of research question
 - Identification of additional information/data needs
- Understand your information/data needs/objectives
 - Literature review, methods, materials, etc.
- Utilize primary research and research reviews
 - Reading scientific articles
- Embrace that the research process by its nature is iterative and it always leads to more questions

Information Tactics for Research Projects

- Mind Mapping is an exercise that gives a visual framework for organizing ideas and making associations
 - Map is organized around keyword or idea
 - Associations are mapped
 - Can help *information identification and seeking* by
 - Identifying and associating concepts/subjects
 - Identifying and developing keywords for information seeking



* Not to be confused with a flow map or concept map

Biochemistry Information Tools/Resources

- Scopus
 - Premier abstract and citation database of peer-reviewed literature: scientific journals, books and conference proceedings. Scopus features smart tools to track, analyze and visualize research.
 - 60 million+ records
 - Medline and PubMed ingested as well
- Journals
 - Access to thousands of journals
 - Search with journal
 - Robust search features
- SciFinder
 - Premier abstract and citation database of peer-reviewed literature for Chemistry

Document search

[Compare sources](#)

[Documents](#) [Authors](#) [Affiliations](#) [Advanced](#)

[Search tips](#)

Search

E.g., "heart attack" AND stress

Article title, Abstract, Keywords

AND

Search

Article title, Abstract, Keywords

Limit

Date range (inclusive)

Published All years to Present

Added to Scopus in the last 7 days

Document type

ALL

[Reset form](#) [Search](#)

Key Tips for Using Scopus

- Register
 - Save searches
 - Exports
 - Alerts
- Understand search logic
 - Keyword driven – NOT natural language
 - Assumes truncation
 - Assumes AND in between keywords unless you tell it not to
 - Gene therapy is interpreted as the search gene AND therapy
 - “gene therapy” is interpreted as one keyword
 - Read https://help.elsevier.com/app/answers/detail/a_id/2370/p/8150/related/1
- Use Boolean operators
 - The three basic Boolean operators are: AND, OR, and NOT

Key Tips for Using Scopus

- Use refine feature(s)
 - Year, subject area, document type*, keyword terms, source , author*
 - Sort by
 - Date, citations, relevance
- Assessment
 - Scopus metrics
 - Journal
 - Author
 - Citations
 - Documents by year
 - Funding
- Retrieve full text
- Exports to citation manager

Using Journals

The screenshot shows a library website's navigation menu. At the top, there are links for Libraries Home, Library Branches, Research Help, Services, About, My Accounts, and Ask Us!. Below this is a search bar with the text "Enter search term" and a "Search" button. A sidebar menu on the left includes "OneSearch", "Books and More", "Journals and Articles" (highlighted with an orange arrow), "Databases", "Reserves", "Guides", and "Special Collections". The "Journals and Articles" section is expanded, showing sub-options: "Journals by Title", "Articles", "Databases", and "Interlibrary Loan Request". Below this, there is a "What's this?" section with a link to "Off-Campus Access" and "ILL Request". To the right of the sidebar, there are icons for "Ask Us", "Library Catalog", "Staff Directory", and "Custom Help". At the bottom of the sidebar, there is a "Today's Hours" section listing hours for Bixler Art and Music Library, Miller Library, Science Library, and Special Collections, with a note that Special Collections are closed.

All Journals Only Books Only

Title contains all words Search

Title begins with

Title equals

Title contains all words

ISSN/ISBN equals

Showing results 1 through 19 of 19

Annual review of biochemistry

ISSN: 0066-4154

Peer Reviewed

1932 to Present in [Annual Reviews Complete A-Z List](#)

07/01/1997 to 07/31/2005 in [Academic Search Complete](#)

Search inside this journal

Search

<http://www.scimagojr.com/journalrank.php?category=1303>

SJR Scimago Journal & Country Rank

Home Journal Rankings Country Rankings Viz Tools Help About Us

Biochemistry, Genetics and Molecular Biology All regions / countries 2015

Display only Open Access Journals Display journals with at least 0 Citable Docs. (3years)

1 - 50 of 377

Title	Type	↓ SJR	H index	Total Docs. (2015)	Total Docs. (3years)	Total Refs.	Total Cites (3years)	Citable Docs. (3years)	Cites / Doc. (2years)	Ref. / Doc.	
1 Annual Review of Biochemistry	journal	24.872 Q1	248	35	91	5186	2398	91	21.76	148.17	
2 Nature Methods	journal	21.715 Q1	189	358	1142	6622	16776	592	21.18	18.50	
3 Annual Review of Biophysics	journal	10.310 Q1	131	15	77	1897	982	74	12.50	126.47	

Using Journals

- Going to key journal websites provides:
 - Insights into current topics
 - Features not found in abstract databases
 - Summary points
 - Future issues
 - Links to dynamic images and citations (in and from article) and author publications
- <http://www.annualreviews.org.colby.idm.oclc.org/loi/biochem>
- <http://www.annualreviews.org.colby.idm.oclc.org/doi/citedby/10.1146/annurev-biochem-060815-014343>

Additional Information Tools

- All about citations (<http://libguides.colby.edu/c.php?g=589881>)
- ACS style guide (<http://cbbcat.net/record=b4737670~S19>)

- Hyperlinks
- Scopus (<https://colby.idm.oclc.org/login?url=https://www.scopus.com/>)
- Journals (<http://www.colby.edu/libraries/#2>)
- SciFinder (<http://libguides.colby.edu/ch242>)