

# Finding Sources for Biology 370



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# Objectives

- Use the library's online catalog to find resources
- Use the library's online databases to find articles in *Biological Sciences*, *Elsevier ScienceDirect*, other sources
- Know the difference between primary, secondary and tertiary sources



# Scientific Literature Sources

- **Primary**
    - Original research
  - **Secondary**
    - Analyze, interpret information from primary research
  - **Tertiary**
    - Collection, summary of both
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# Primary Literature

- Primary
  - Reports of original research by scientists
    - Peer-Reviewed Journal articles (Refereed by an editorial board of experts in the field)
      - *Ecology*
      - *Cell*
      - *Science* (has secondary articles as well)
    - Conference reports
    - Dissertations
    - Technical reports from government agencies



# Primary Literature

## Some Common Components

- Narrow Focus
  - Literature Cited
  - Methods
  - Results
  - Discussion
  - Conclusion
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# Secondary Literature

- More general works based on primary literature. Provides overview to help in understanding primary literature. May be peer-reviewed.
  - Reviews
    - *Advances in Ecological Research*
    - *Annual Review of Microbiology*
  - Books
  - Periodicals
    - *Discover*
    - *Natural History*
    - *American Scientist*



# Tertiary Literature

- Collection or summary of information from primary and secondary sources. Not peer-reviewed.
  - Encyclopedias
    - *Encyclopedia of Virology*
    - *McGraw-Hill Encyclopedia of Science and Technology (also electronic)*
  - Bibliographies
  - Handbooks/Manuals
  - Website from government agency (NIH, CDC)



# Evaluating Primary Literature

- Where did you find it? Web or database search?
- Is the journal peer-reviewed or refereed?
- Author(s) affiliation, such as university?
- Author(s) published before on topic
- Is he/she an expert in the field?
- Are all sources cited?



# Finding Articles

- Library Catalog-find journal titles
- Databases-find journal articles
- Serials Solutions-search by title or subject areas to see if the journal is available in electronic format in a database



# Finding Articles

- Full text articles may be found in some library-subscribed databases ([restricted access](#) for registered users)

[http://www.jsu.edu/library/resources/remote\\_access\\_help.html](http://www.jsu.edu/library/resources/remote_access_help.html)

- *Biological Sciences*
- *Elsevier ScienceDirect*
- *Wiley InterScience Life Science Journals*
- *JSTOR*
- General databases: *Academic Search Elite, Academic OneFile*



# Finding a Full-text Article

- Check the library's online catalog for the journal title to see if we subscribe
- Find the electronic format with Serials Solutions
- Reputable Web sources, including *PubMed Central*, *HighWire Press*, *BioMed Central*. Also *Google Scholar*.
- Links from the database record to the catalog and Serials Solutions



# The Article Is Not in This Database. Now What?

- **Serials Solutions** is linked from the Library's home page and Find Articles & Databases page.
- Check to see if the journal is available full-text in a database with Serials Solutions. If it is, you can click on a link to go to that database.



# References/Further Reading

- “Primary, Secondary and Tertiary Sources in the Health Sciences” University of Minnesota Bio-Medical Library

<http://www.biomed.lib.umn.edu/inst/sourcesinhs.pdf>

- McMillan, Victoria E., *Writing Papers in the Biological Sciences*  
QH 304.M36 2001

- “Using Scientific Literature in Biology Courses,”  
Earlham University

<http://www.earlham.edu/library/documents/biocite.pdf>



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# My Hours

- Monday: 3:30 p.m. to 11 p.m.
- Tuesday: 7:30 a.m. to 4:30 p.m.
- Wednesday: 7:30 a.m. to 4:30 p.m.
- Thursday: 7:30 a.m. to 4:30 p.m.
- Friday: 7:30 a.m. to 4:30 p.m.
  - Lunch: Usually 12 p.m. to 1 p.m.