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
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
- Methods
- Discussion
- Literature Cited
- Results
- Conclusion
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 Not peer-reviewed.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

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

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