STARTING YOUR RESEARCH

- **Online Research Guide for Biology & Environmental Science**: On the library home page, library.barnard.edu, click on “Guides and Tutorials.” Or click on “Research Guide” in CourseWorks.
- **Research Help**: email or call me, or use the online chat link on the library home page.
- **Consultations**: Request a one-on-one consultation with me via email or the Contact Us page.

SCHOLARLY AND POPULAR SOURCES

Scholarly journals and books are written for specialized readership,
- by scholars or experts in a field of study, describing “cutting edge” research,
- are “peer reviewed” or “refereed” by other experts as a quality control mechanism,
- have footnotes (or endnotes) and references,
- give the affiliation of the authors (university, research institution),
- and in the sciences and the social sciences, each article also has an abstract.

Popular magazines are written for a general audience, and do not have the above features.

FINDING SCHOLARLY ARTICLES

More databases are listed on the Research Guide for Biology & Environmental Science

**Google Scholar**
- This is a full text search, so you may get too many irrelevant hits.
- Using the Advanced search, you can search titles only (allintitle:), but you may not get enough hits.
- Go to **Settings – Library Links** to enable eLink@ Columbia. It can help you to find the full text when off-campus, and it gives the DOI of the article and a link to export to EndNote.
- Go to **Settings – Bibliography manager** to enable a link to export to EndNote directly from Google Scholar.
- Sample searches:
  - intraspecific competition in plants
  - “intraspecific competition” in plants
  - allintitle: “intraspecific competition” in plants
  - “intra-specific competition” in plants
Web of Science (All Databases)

- The Science Citation Index is one of the databases in the Web of Science, published by Thomson-Reuters, which also produces EndNote, so Web of Science and EndNote work very well together.
- Sort the results by “Times Cited” to find out which articles are the most influential.
- Sample searches:
  - intraspecific or “intra-specific” on first line, competition on second line, plants on third line
  - Using truncation: intraspecific or “intra-specific” on first line, compet* on second line, plant* on third line

ENDNOTE

- Columbia has a subscription to EndNote and EndNote Web (“EndNote” by itself means the desktop version). To download the desktop version, go to the Reference & Citation Management page at library.columbia.edu/research/citation-management
- To register for an EndNote Web account, go to endnote.com, click on “LOGIN” at the top, then “create an account.”
- See the guide on the library website at library.barnard.edu/find-books/guides/endnote

HANDS-ON EXERCISES

- Set up an EndNote Web account at endnote.com.
- Also open EndNote Desktop. Go to File – New to set up a new group, and call it Ecology.
- Search for the topic allelopathy and “inhibition of seed” in these two databases: Google Scholar and Web of Science. (Use CLIO to find the link to Web of Science.)
- Answer the following questions.

A. Google Scholar
   a. How many results do you find? ________
   b. Use allintitle: to limit the search to the title only. How many results are there? ________
   c. Go back to the previous list of results, and limit to articles from 2010 to 2015. How many results are there? ________
   d. Export two citations to EndNote.

B. Web of Science – All Databases
   a. How many results do you find? ________
   b. Sort the list by Times Cited – highest to lowest. How many times has the most-cited article been cited? ________
   c. Limit the search to Document Type: Review
   d. Use Search History to go back to the previous list of results, and export two citations to EndNote.