**Assignment #1: Nobel Laureate contributions to Cell Biology**

**Strategy 1: Discoveries of a Nobel Laureate**

Nobel Prize website  [www.nobelprize.org](http://www.nobelprize.org)

*Lecture* by, *Interview* with scientist plus *Other Resources*, including e.g. scientist’s home page, look for *Publications* with links to primary research articles citations and any full-text

**Access Science** from [Library WebPage > Articles & Databases](http://www.okanagan.bc.ca/library)

Encyclopedia of science & technology including research reviews, articles of scientists work

**Strategy 2: Find Primary (Original research) & Secondary (Review) literature**

[OC Library WebPage](http://www.okanagan.bc.ca/library)

Search [OCtopus](http://www.okanagan.bc.ca/library) for Books, Media, Articles, and More!

**Access Tip!**

For *off-campus / wireless* access to OCtopus, at *Hello Guest* prompt enter *current OC student id number* and your *last/family name*.

Results can include reports, academic & scholarly journal articles, popular magazine and newspaper articles. For Biology research, EBSCOhost databases are searched – [Academic Search Premier], [Biomedical Reference Collection, Medline] plus [JSTOR, Science Direct] including key scientific academic journals – *Nature*, *PNAS*, *Science*, *Cell*, *Journal of Cell Biology*, *Scientific American*, *Lancet*, *Bioscience*, *Annual Reviews*, *Nature Reviews*.

**Type in your terms**  e.g. blobel gunter protein*  sanger dna sequencing dideoxy

At the *left menu column*, *Refine Results*

1. For *Journal Articles*  

   Tick the box  

   Peer Reviewed & Scholarly
2. Limit to results in a particular group of articles, on bottom of [left menu column](#) under **Databases**. Click **show more** select **specific databases** eg. Medline, Academic Search, ScienceDirect, JSTOR

3. Need better results?
   Under top search boxes, click **Advanced Search**. Type your extra terms into other boxes

   - blobel gunter
   - protein*
   - metabolism OR signal* OR targetting
   - nature reviews  SO Journal title

**Search Tips!**

- Use **date-slider** to get results pre- and post- Nobel Prize award date
- Unclick Peer-Reviewed then, click **Resource Types > Magazines** to get **popular literature**

**Results Tip!**

- Use **Add to Folder** to gather your selected results then **print/email/save** results set
- Stop to tick the **citation format box for APA** to get a **References list** along with full-text of your articles
Assignment #2: Cell & molecular biology in understanding & treatment of disease

Strategy 1: Cell biology of disease (Background)

Online Mendelian Inheritance in Man (Johns Hopkins University School of Medicine)
www.omim.org
Follow links to References. If no immediate full-text, use Strategy #5 in this guide

Strategy 2: Secondary (Review) & Primary (Original research) literature

OC Library WebPage  www.okanagan.bc.ca/library

Search OCtopus for Books, Media, Articles, and More!

Type in terms:
“muscular dystrophy”  “muscular dystrophy” (cell* OR gene* OR biology)
“muscular dystrophy” (cell* OR gene* OR biology) review*  
“lysosomal storage disorder” gene*  malaria gene* treatment
acute promyelocytic leukemia gene* treatment  spino cerebellar ataxia* gene*

At the left menu column, Refine Results

1. For Journal Articles
   Tick Peer Reviewed & Scholarly
   Start with this box ticked Available from OC
   . Use date-slider to get most current results e.g. 2011-2016
   . Refine Results by Subject to get results with best subject match
e.g. lysosomal storage diseases

   Tip! Alternatively type subject term(s) into top search box

2. To limit to results in a particular set of articles, on bottom of left menu column under Databases [click show more]
click on a specific database e.g. Medline, Academic Search or JSTOR

Untick Peer-Reviewed, then click Resource Types > Magazines to get popular literature
3. Need more results?

Under left menu column, Untick the box Available from OC.
If there is no full-text for your desired result(s), click Where can I get this article? link to submit an online Interlibrary Loan request

4. Need better results?

Under top search boxes, click Advanced Search.
Type your extra terms into other boxes

- muscular dystrophy
- AND cell* OR gene* OR biology
- AND review* (for review articles)
- AND "journal of cell biology" in Source journal (for academic articles in Journal of Cell Biology)

### Assignments #1 & 2

**Strategy 3:** Search in a specific database

Lib WebPage > Articles & Databases > Databases by Subject > Biology

Recommended for: Primary Research articles

- JSTOR covers PNAS and many scholarly peer-reviewed scientific journals e.g. Journal of Cell Biology. Focus is on back-files with most current, 2012

  **Tips!** No subject searching feature, so search in full-text or title

  Check boxes for ✓ article ✓ review ✓ Include only content I can access

Recommended for: Review Journal articles

- Use Octopus search engine. Limit to database like Academic Search Premier, Medline
  - Look in results from Annual Review of (Cell and Developmental Biology, Medicine, Physiology or Plant Biology)
  - Nature Reviews (Molecular Cell Biology, Cancer, Immunology)
  - Microbiology and Molecular Biology Reviews
  - Quarterly Review of Biology

Recommended for: Popular Magazine articles

- Use Octopus search engine. Limit to database like Academic Search Premier
  - Enter search terms, click Resource Types > Magazines
  - Look in results for titles in the popular science literature like Discover, New Scientist, Popular Science or Scientific American as well as general interest magazines, USA Today, Time, Macleans
Google Scholar

**Tip!** use this link and find what Scholar has that you can get full text through OC

- Access articles from a wide variety of academic publishers, professional societies and universities plus scholarly articles available across the web & JSTOR.
- Many online journal articles show as pay-per-view - don't pay!

**Tip!** Click Settings on top menu bar then click Library Links. Type Okanagan College. Save preferences. Then at your search results list, you will have option to Click on Where can I get this at Okanagan College Library? And find it freely available at OC.

- Search any cited author by name to find other articles by them
- Expand your search to Google, for the author's personal websites for lists of and links to their publications

**Strategy 4:** Search for primary research in a specific scientific journal

Lib webpage > Articles & Databases > Find Electronic Journals by Title

- Search by *title of journal* to find database(s) to access journal full text at OC

*Nature* – for articles from 1869 to current articles-on-demand, goes to Library's subscription to journal publisher’s website; for articles from 1997 onwards but not current year, goes to Library’s Academic Search Premier database
- enter key terms to find articles just in this journal, click search within this publication

**Strategy 5:** Find articles from Reference list of citations, or article without immediate free full-text

Try the OCtopus engine first, type *author(s) names & title words* from article.
If in an OC licensed database or e-journal collection, the full text may appear.

OR Lib webpage > Articles & Databases > Find Electronic Journals by title
- Search by *title of journal* to find database(s) to access journal full text at OC
- Find search box, either on journal website or in article database (as above), enter *author(s)names & title words* to find specific article

**APA style**

- Keep details of your sources, cite them (in-text) in your essay & list them on a References page at the end of your paper or presentation.
- Library WebPage > Help > Style & Citation Guides (APA, Chicago, MLA)
- APA Style Guide from Purdue University Online Writing Lab (OWL)

**Need help?**

- Ask librarians at the Library Research Help desk
- Research Help links to librarians by email & AskAway live chat Library WebPage
- Michelle Ward, Biology Librarian email: mward@okanagan.bc.ca
Scientific information evolves through a continuous process of communication among scientists. It develops in cycles moving from ideas, through research that tests the ideas, to publications reporting the results, first in the primary literature and later in the secondary and, if significant enough, in the tertiary literature.

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<thead>
<tr>
<th>Year 1</th>
<th>IDEA</th>
<th>Formation of a hypothesis.</th>
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<tbody>
<tr>
<td></td>
<td>RESEARCH</td>
<td>Search of the literature to see what has been done before and testing of the hypothesis in the lab or field.</td>
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<tr>
<th>Years 1-3</th>
<th>INVISIBLE COLLEGE</th>
<th>Informal discussion of research with colleagues via email, discussion lists, at meetings, seminars, etc.</th>
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<tr>
<td></td>
<td>GREY LITERATURE</td>
<td>More formal record of research published as preprint or technical report, a personal website, or given as a paper at conference for which proceedings not published. (This type of publication is part of the primary literature, since it is an original record of research, but is called &quot;grey&quot; by librarians because harder to locate than the readily available primary literature below.)</td>
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<th>Years 3-5</th>
<th>PRIMARY LITERATURE</th>
<th>Detailed record of research formally published as an article in a journal or a paper in the published proceedings of a conference. Some of these are brief reports of research in progress (sometimes called &quot;communications&quot; or &quot;letters&quot;), with whole journals or a section of a journal devoted to this format. Unlike these brief reports and papers delivered at conferences, the longer research articles in scholarly journals are peer-reviewed prior to publication lending them the most authority.</th>
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<td></td>
<td>SECONDARY LITERATURE</td>
<td>Publications summarizing and pointing to the primary literature soon after it appears. Their main purpose is to facilitate timely access to scientific information. Most significant in this category are electronic indexes or article databases, in which you search across journals to find articles of interest.</td>
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<td><strong>Review articles</strong> published in journals or appearing in annual volumes devoted exclusively to reviews. A review is a digest of recent research in a particular subject area and, if available for your topic, an invaluable resource for background information. Add “review” as a keyword when searching article databases.</td>
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<td><strong>Magazines &amp; Newspapers</strong> published for a broader and more popular audience; not peer-reviewed; contain research of others rather than the original reports.</td>
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<td><strong>Books</strong> that review current literature also fall into this category.</td>
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<td></td>
<td>TERTIARY LITERATURE</td>
<td>Publications that also summarize and point to the primary literature, but generally only after it has become widely accepted and believed, such as handbooks, encyclopedias, textbooks, and popular literature-- all good sources for background information.</td>
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