INTRODUCTION TO PUBMED, OMIM, AND NIH

The purpose of this lab is to familiarize those of you with some of the more common research databases used in biology and medical research. These are the most common databases used in cell/molecular/medical and developmental biology and the most comprehensive database in medical biology.

RESOURCES

OMIM
Online Mendelian Inheritance in Man – genetics of human’s: this database covers normal and abnormal genes and sequences – it has links to research, literature, and in some cases (where known) to current medical treatments. It also has links out to non-human species.

NIH
This is the central clearing house for much of the peer reviewed research done world wide – it is divided into various units covering specific areas of biomedical research. www.nih.gov

NLM
National Library of Medicine – contains searchable databases for most peer reviewed research done world wide over the last 40 years or more. It also has a civilian section design to help people understand diseases, treatments, and medical research. www.nlm.gov

GenBank

Bookshelf

NEIU Ronald Williams Library
For access to additional science and general article databases. www.neiu.edu/library

LAB

1. On your own, go to OMIM and find a rare pathology that you are interested in – this will be the topic for your talk at the end of the term. Once you have selected a topic for your talk, write a short 1 paragraph rationale with 3 references and submit it on Dropbox in D2L.
2. Visit the library website at: www.neiu.edu/library. Click on the “Databases” tab. Locate a database using the alphabetical list (for example, click “B” for “Biological Abstracts”). Click the link to open the database. If you are off campus, you will be prompted to log in.
3. Select one term from the ECOLOGY section and search all six databases. Cut and past the first three (don’t worry if you get fewer) returned reference into the appropriate box in the form below. Write a short paragraph explaining the results.
4. Select one term from the CELL BIOLOGY section and search all six databases. Cut and paste the first three returned references into the appropriate box in the form above. (Don’t worry if you don’t get three). Write a short paragraph explaining the results.

5. Enter a search of your terms in each of the six databases, and copy and paste the top three. Write a short paragraph explaining your results.

6. Combine the below form and your 3 paragraphs into a single document; submit it via D2L.

<table>
<thead>
<tr>
<th>Biological Abstracts</th>
<th>PubMed</th>
<th>Academic Search Complete</th>
<th>LexisNexis Academic</th>
<th>Google Scholar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969-present Peer reviewed articles</td>
<td>1950-present Peer reviewed articles</td>
<td>1975-present Some peer reviewed articles</td>
<td>Varies by source Some peer reviewed</td>
<td>Peer reviewed articles</td>
</tr>
</tbody>
</table>

**CELL BIO TERMS**
- Vitamin D
- Apoptosis
- H1N1

**ECOLOGY TERMS**
- Succession
- Founder effect
- Intermediate disturbance hypothesis

**YOUR TERMS**

...