How to Review the Literature

What is the Literature?

- JOURNAL ARTICLES: Most up-to-date but still about 2 yrs old.
- INTERNET SOURCES: Use only refereed electronic journals.
- CONFERENCE PROCEEDINGS:Latest research, but not yet published as full papers.
- GOVERNMENT AND CORPORATE REPORTS: Good resources for commissioned research.
- THESES AND DISSERTATIONS: Limited use, may be difficult to obtain, researcher usually inexperienced.
- BOOKS: Less up to date than journals, can be a good starting point, e.g., Annual Reviews.

Do These Steps

- 1. Read the papers in your binder
- 2. Think about the papers in your binder
- 3. Talk about the papers in your binder

Then...Use the MIT Electronic Library

4. Look up the references for background material listed in the binder...

...and look up papers of interest from the reference lists of provided papers

And Use PubMed

5. Use PubMed to find other papers that specifically pertain to your Team Project:

Resources for On-line Research

- PubMed
- http://www.ncbi.nlm.nih.gov/PubMed/

• MIT library access to on-line journals

PubMed

- PubMed, available via the NCBI <u>Entrez retrieval system</u>, was
 developed by the <u>National Center for Biotechnology Information</u>
 (NCBI) at the <u>National Library of Medicine (NLM)</u>, located at the
 National Institutes of Health (NIH).
- PubMed, a service of the National Library of Medicine, includes over 14 million citations for biomedical articles back to the 1950's. These citations are from MEDLINE and additional life science journals.

Use PubMed to:

- Follow papers by a particular author
- Follow papers by a particular lab
- Follow papers by key words

6. What other methods can you use to find papers pertaining to your Team Project?

- 6. What other methods can you use to find papers pertaining to your Team Project?
 - Look at the web pages of specific labs they often list references and include links
 - Talk to your professors
 - Talk to each other

Keep a Good Electronic Library

Your references must be accurate:

Type them only once and make sure they're correct - Format them now to save time

Make sure the content goes with the reference Keep good notes, i.e., annotate your reference list.

Vicious Cycle of Literature Reviews

Defining your research problem.



Reading all sources relevant to your problem.

Questions to Keep in Mind

1. What do we know about the area of inquiry - and what DON'T we know?

2. What are the key concepts, factors, variables?

3. What are the relationships between key concepts, factors, variables?

4. What are the current theories?

Questions to Keep in Mind

- 5. What are the inconsistencies and other shortcoming?
- 6. What needs further testing?
- 7. What evidence is lacking, inconclusive, contradictory, limited?
- 8. What designs or methods are faulty?

Questions to Keep in Mind

9. Why study this question further?

10. What contribution will your work make?

Good Luck