What is an Honors Thesis?
Finding & Developing a Thesis Topic

A Short Presentation for Honors Students
Writing Theses in the Lab Sciences

by Dr. Ben Pierce:
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Frequent Honors-Thesis Director
Start Early in Finding a Topic

- For humanities theses: reading and writing

- For scientific-research theses: reading, lab/field work, and writing
Typical Thesis Schedule (in laboratory sciences)

- 1st Year – take classes

- 2nd Year –
  - fall: take classes
  - spring: talk to faculty about possible topics; select faculty mentor

- 3rd Year –
  - summer: begin readings
  - fall: begin lab/field work; learn techniques; refine topic
  - spring: begin research
Typical Thesis Schedule (in lab sciences)-- *Continued*

- **4th Year** –
  - *fall*: continue research
  - *spring*: analyze data; write thesis; defend

- **Bottom Line**: Need to start looking for a topic and mentor 2\(^{nd}\) year
Picking a Thesis Topic

- Should be original research
  - not a demonstration or lab exercise
- Should be related to mentor’s expertise
  - limitations of equipment, experience
- Needs to be something that can be finished in two semesters
- In most cases, a part of mentor’s research program
Typical Scenarios

- mentor suggests several possible topics; student picks one
- student develops own topic through discussions with and guidance from mentor
- student develops idea; finds mentor willing to sponsor it
  - rarely works in sciences
Typical Track for Honors Student

- takes coursework; selects general area of interest (genetics, ecology, organic chemistry, etc.)
- visits with professors; discusses areas of research and possible topics
- selects mentor
- reads in mentors area of research; together with mentor, develops thesis topic
Advice for Honors Students

- the secret to research is perseverance
- 90% of research (at least in the sciences) is developing the methods
- pick a question that can be answered
- keep the topic focused
Some of My Former Honors Students

sex ratio and parasitic sex factors in isopods

Lissa Lubinski

Dan Bennett
Some Former Honors Students--

Continued

- Neeta Verma – Effects of body mass and developmental stage on acid tolerance of tadpoles
- Frank Hensley – genetic structure of cave-dwelling slimy salamanders
- Xylina Gregg – genetics of sodium content and acid tolerance in tadpoles