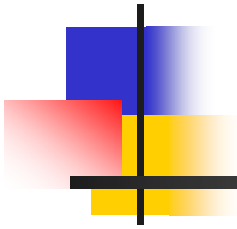


The Role of Research in Launching a Career



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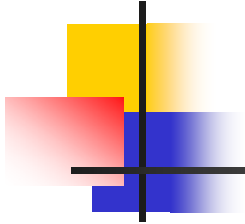
(based on presentation by Tim Bralower, 2006)

At this point:



- Much of your time and energy has been focused on research
- Your research will be important in getting your first job (in many cases)
- Your research may have made you a better teacher
- You probably have not been a PI, but you may have mentored undergraduates
- For many new professors, launching a research program is the most stressful part of their job

Develop a Vision for your Research



- You don't have to keep doing exactly what you have done for your PhD (need to move beyond)
- Make it
 - something that you feel confident and excited about
 - topical and relevant with potential for the future
 - something that integrates well with teaching
 - builds on strengths of your (new) setting
 - broad enough to appeal to more than one funding agency

These suggestions apply to all types of positions



The Role of Research in Teaching

- A visionary research program will help your teaching no matter where you teach
 - curriculum development, active learning exercises, labs, field exercises, design of small seminars, possibilities for honors projects
- Many students are drawn to research
- Research keeps you and your students current on science
- Possibility of research on learning

Undergraduate-only Institutions/departments



- Less time for research but still expected
- Critical to carve out time during semester and especially during summer and other breaks
- Develop programs that involve undergraduates. Go after funding (internal, external)
- Local field programs are great
- Collaborate with faculty elsewhere if instrumentation is limited



"Research" Universities

- More time for research but good teaching is still expected
- Carve out time almost every day to make progress with research
- Consider developing programs that involve undergraduates
- First authored publications are key in promotion
- Design your research so that you can attract funding from various agencies



Undergraduate-only Institutions

- Identify successful research programs
- Vet out your research/proposal ideas with colleagues
- Find research that integrates well with proposed teaching, undergrad research
- Find research areas that involve students and can be done on a tight budget
- Look out for RFPs and follow many of the same pointers as in the next slide....



"Research" Universities

- Identify successful research programs
- Vet out your research/proposal ideas with colleagues, mentors, program managers
- Get copies of successful proposals and have colleagues review proposals before submit
- Find out about RFPs
- Give proposal writing plenty of time
- Be patient and don't get discouraged



Making the Transition: Some Examples

- Research university →
 - two-year college
 - predominantly undergraduate institution
 - liberal arts college environmental science program
 - MS granting university
 - PhD granting university
 - Museum, lab, education/outreach program, ...



Exercise for Later

- Write a paragraph describing the vision of your research program
 - Description of program (goals, questions, ...)
 - Where the program will go in the next five years, next 20 years
 - Why it is topical, significant
 - How it integrates with your teaching
 - What you imagine your research facility and group (i.e. students) to look like in the future
 - Why you are excited about it