

Balancing the Demands:  
Succeeding in a Faculty Position  
at a Predominantly  
Undergraduate Institution (PUI)

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# Understand the Criteria

- Expectations in areas of teaching, research and service
  - Don't expect a checklist
- Where is the decision made?
  - Institution? Department? Both?
  - Agreement between department and institution on messages and expectations?

# Teaching: Department/Institution

- Experimentation with teaching? Pre-tenure  
– best to follow the established direction
- Importance of student course evaluations?
- Teaching versus research? Or research as teaching? Or teaching integrated with research?
- Number of new preparations? Important to establish some courses through repetition



# Scholarly Work: Department/Institution

- Published work versus student experiences?
- Importance of grants?
- Value of collaborative work?
  - If you do collaborative work, essential that you explain to evaluators your significant intellectual contribution to the work

# How to Get Tenure?

- Put on blinders
- Goal is clear – get tenure!
  - Make decisions with this goal in mind
- Establish yourself as a teacher and scholar
  - Avoid service – use your probationary status to advantage
  - Don't volunteer
  - Just say NO!

# Undergraduate Research Summit

<http://www.bates.edu/x50817.xml>

- Examine issues involved in undertaking and sustaining chemistry research at PUIs
- Provide recommendations on how to enhance the amount, quality, productivity, and visibility of research at PUIs



## ENHANCING RESEARCH

in the Chemical Sciences at Predominantly  
Undergraduate Institutions

A Report from the Undergraduate Research Summit  
Bates College, Lewiston, Maine  
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# Establishing Yourself as a Scholar

- Write grant proposals
- Write more grant proposals
- Write even more grant proposals
  - Look under every rock for \$\$\$\$
- Devote summers to research
  - Involve students to build momentum for the academic year
- Don't let teaching consume every minute

# Teaching Strategies: Pre-tenure

- You do get better at balancing the demands
- Be judicious in the number and scope of assignments and labs
- Be guarded with office hours
  - Schedule group sessions instead of encouraging individual visits
- Seek a teaching schedule that leaves blocks of time for research
  - Protect that time for research
- Encourage student collaboration in classes



# Why write grant proposals?

- Most chemistry projects require money
- Refines your ideas – whether or not the proposal is funded
- Impresses your department/institution
- You may get the grant – provides resources and more incentive than internal money to actually get work done

# Too many faculty members at PUIs do not write grant proposals because they:

- Claim that they do not have the time
  - Make the time
- Convince themselves that they won't get funded
  - If you don't submit, it is true that you won't get funded
- Code for people who are not that serious about doing research

# Generating Ideas

- Attend smaller specialty conferences
- Form regional disciplinary group
- External seminar speakers
- Council on Undergraduate Research ([www.cur.org](http://www.cur.org)) mentor network
- Collaborations
- Sabbatical leaves



# Creating Time for Research

- Teaching schedule
  - set up so have blocks of time
  - Unbalanced semesters
- Close door on research day(s)
- Collaborate with students
  - Develop system that encourages students to do research for course credit
- Incorporate research into courses
  - Probably better teaching/learning than traditional lab experiences

# Writing More Competitive Proposals

- Read the instructions
- Attend proposal-writing workshop/CUR Dialogue meeting
- Have an excellent idea
  - informally test your ideas on colleagues
- Excellent ideas are usually ambitious
  - not just a continuation of or derivative of prior work

- Explain the significance of the work to the discipline and possibly society
- Clearly explain the experimental work that will be undertaken
- Clearly explain how the experimental work will answer the questions you pose to study
- Provide a plan B if plan A is risky
- Be succinct in your descriptions
- Note that all of the comments above relate to the **SCIENCE**



- Convince the reviewers that you can successfully undertake the project
  - Institutional support and infrastructure
  - Appropriate collaborations (with letters of support)

- Address the impact the work will have on undergraduates
- Convince the reviewers that undergraduates can undertake your line of work (or set up collaborations for especially ambitious aspects of the project)
- But remember that the reviewers really want to be convinced that high quality science will be done

- Find colleagues who will provide substantive and critical comments on a draft of your proposal
- Listen to those colleagues
- If the proposal is rejected, resubmit a revised version that addresses the criticisms raised by the reviewers
  - unless the criticism is that the general idea does not merit funding
- Talk to the program officer – she or he won't bite!



**Remember:**

**You will never get a grant  
unless you submit a proposal**

# Sources of Funding

- Research Corporation ([www.rescorp.org](http://www.rescorp.org))\*
- Petroleum Research Fund ([www.acs.org](http://www.acs.org))\*
- Camille and Henry Dreyfus Foundation ([www.dreyfus.org](http://www.dreyfus.org))\*
- National Science Foundation ([www.nsf.gov](http://www.nsf.gov))
- National Institutes of Health – AREA program ([www.nih.gov](http://www.nih.gov))

# Programs of the NSF

- Research at Undergraduate Institutions (RUI)
- Major Research Instrumentation (MRI)
- Research Experiences for Undergraduates (REU)
- Course, Curriculum and Laboratory Improvement (CCLI)