Proposal Basics

• Who are all the I’s?: PI, Co-PI, Co-investigator
• Investigator Initiated Grants: Program Announcements, Funding Opportunities, Program Solicitations etc
• Requests for Applications or Proposals (RFA & RFP):
  • Note: Often one time opportunities with specific due dates and shorter time frame.
  • Grant or Contract
• Letter of intent and pre-proposal
The Grant Process

Positioning yourself to be competitive

Pre-Proposal:
- Idea Development
- Building Collaborative Teams
- Finding a funding source

Proposal:
- Writing, Editing, Review
- Budgets and Staffing

Proposal: Submission

Funding Decision:
- “Get to work” OR
- Revise and resubmit
Positioning Yourself to be Competitive

- Find your passion
- Establish your reputation
  - Scholarship (publishing)
  - Use available (University and other) resources as a springboard
- Develop collaborations
- Volunteer to serve as a grant reviewer (get the “insiders” perspective)
The Pre-Proposal Phase

• Start **early** and with a good idea
• Identify significance & broader impact of project
  • What makes your project unique and you uniquely qualified to carry it out?
  • Proposal will be judged on scientific merit and potential for impact (even proposals aimed at developing undergraduate research e.g. NIH R15)
• Identify potential funding sources (Office of Sponsored Research can assist). Project should be aligned with funder’s goals and priorities
The Pre-Proposal Phase

• **Talk to the project officers – early and often!**
  • Help evaluate the fit of your idea to funding priorities
  • May suggest alternative funding mechanisms
  • Guidance for how to strengthen your proposal (note: this is not uniform across all agencies)

• **Collaboration (internal & external)**
  • Repeated Theme: “**Seeking collaborations is critical**”
  • Benefits of multidisciplinary perspectives for advancing knowledge
  • True collaborations/partnerships, not fabricated to make a proposal look good.
The Proposal Phase

- Again: Start Early (e.g. 3-6 mos. before due date) & talk to project officer
- **Read the application carefully and follow the instructions**
- Communicating the intellectual merit, significance and broader impact of the work
- Learn about the review panel
- Proposal should be well organized & easy to read - reviewers read multiple proposals (sometimes 10-15)
- Consider asking colleague(s) to act as mock reviewer
- See NIH website for more tips: http://grants.nih.gov/grants/writing_application.htm#tips
NIH R15 AREA Grants

- Objectives of the AREA Grant program:
  - Support meritorious research
  - Strengthen the research environment of schools that have not been major recipients of NIH support
  - Expose undergraduate and graduate students to meritorious research
NIH R15 AREA Grants

• AREA Grants are:
  • Research awards NOT training awards
  • Limited to a 3-year period
  • Renewable
  • Limited to schools that have received less than $6 million in NIH support
  • Direct costs limited to $300,000 over entire period
NIH R15 AREA Grants

• FY 2008 Awards
  • 758 grants reviewed
  • 212 applications rewarded
  • 28% success rate (varies from institute to institute)
  • $44,172,133 awarded

• What are the chances of getting an R15 funded?
  • Slightly better than some of the other funding mechanisms

• Missouri State currently has 2 R15 Awards (plus 1 supplement)
NIH R15 AREA Grants

Applications (Enhanced review criteria)
  • Use Adobe B Forms
  • Budget and other front matter forms
  • Research Strategy (12 pages) plus 1 page for Specific Aims
  • Facilities and Other Resources
  • Biosketch (note new forms and R15 has some differences from traditional biosketch for PI):
    • Note Specific due dates for R15’s
NIH R15 AREA Grants

• Facilities and Other Resources Section (approximately 4 pages)
  • Extra page opportunity to strengthen your proposal
  • Unique features of environment (profile of students)
  • Research environment
  • How scientific environment will contribute to success
  • Institutional investment in the success of the investigator (special equipment or space, release time, etc)
• Impact of AREA grant on PI and university
NSF RUI Grants

- Objectives of the NSF RUI program (similar to NIH R15):
  - Primarily a research grant - reviewed and judged based on the quality of the science and potential for broader impact
  - Promote and strengthen research environments at institutions not traditionally “research intensive”
    - Requirement: <10 Ph.D. or D.Sc. Degrees per year
  - Promote integration of research and education
  - Does not have a specific dollar limit
- Differences between mission of NSF & NIH
NSF RUI Grants

• RUI Proposals
  • Project summary (1 page)
  • Project Description (15 pages)
  • Literature References
  • Biographical Sketch (2 pages)
  • Budget & Justifications
  • Current & Pending Support
  • Facilities and Equipment
  • RUI Impact Statement (5 pages) – these are extra pages for RUI proposals, use them wisely
NSF RUI Grants

• RUI Impact Statement (5 pages)
  • Contextualize situation
  • Convince reviewers of commitment of University, College(s), Department(s), Investigator(s)
  • Describe importance of research to University, College, Department & Individual
  • Explain approach for engaging students and improving their educational experience
    • How will they engage in the research project
    • Research group meetings
    • Participate in presentations, manuscripts, grants

Adapted From: Wenzel TJ: National Science Foundation Research at Undergraduate Institutions Program (RUI), CUR Workshop, Feb 26, 2010
NSF RUI Grants

• Missouri State currently has 3 of these awards
• RUI – examples of potential budget items:
  • Salary/Stipend Support
    • Summer salary for faculty
    • Student summer support
    • Technician if appropriate
  • Travel
  • Equipment
  • Materials & Supplies
  • Subcontract costs (e.g. genotyping)

From: Wenzel TJ: National Science Foundation Research at Undergraduate Institutions Program (RUI), CUR Workshop, Feb 26, 2010
Grant funding opportunities

• Sources of Funding
  • Federal: DHHS (NIH, HRSA, etc), NSF, NIJ, CDC, DOE, etc
  • State, local agencies: Missouri DHHS, etc
  • Foundations: Missouri Foundation for Health, Gates, Robert Wood Johnson, Keck, MacArthur, etc…

• Finding Funding
  • Agency homepages & grant search engines (e.g. grants.gov, GRC’s GrantSearch)
  • Missouri State’s Office of Sponsored Research