National Science Foundation Research Experience for Undergraduates (REU) Program

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Review Criteria (NSF)

- Intellectual Merit
- Broader Impact

- Project summary must have a distinct paragraph on each – proposal must clearly address each
- Reviewers must specifically evaluate each (separate sections on reviewer's form)

Components of an NSF Proposal

- Project Summary (1 page)
- Project Description (15 pages)
- Literature References
- Biographical Sketch (2 pages)
- Budget and Justification
- Current and Pending Support
- Facilities and Equipment

NSF Research Grants

Culture of the different divisions at NSF

Interdisciplinary projects can provide opportunities as well as challenges

Research Experiences for Undergraduates (REU)

- A research program not curriculum
 - Publications/external funding not much room for research descriptions so biographical information and current/pending support crucial
 - Not enough to just involve students in the work
 - Need high quality mentors with strong programs
- Provides added value to research program that is already strong (although may be division-dependent)

Follow-through on Research

- If there is a way to continue the work beyond the summer – will strengthen the request
 - Faculty participants from other institutions
 - Students continue collaboration (may be easier at PUI since half of participants can be from the home campus)

Theme?

- Divisions may have different views on this – especially for PUIs
- Needs to be authentic should build on existing expertise and not an "invented" theme
- Needs to lead to publication in chemistry, measuring pollutants in a nearby stream likely won't be enough

Student Participants

- PUIs usually half on-campus, half students from other institutions
- Describe selection process/criteria
- Desire to serve students who would not otherwise have a chance to participate in research
- Desire to serve underrepresented minorities
 - Can't just say that will have 50% of participants from minority groups without showing established links – perfunctory letters of support are not enough

Professional Development

- Group of students must interact and not simply be dispersed into individual labs
- Orientation
- Meetings/presentations/workshops
- Closing poster session
- Social activities over summer
- Reunion at professional meeting

Evaluation

- Outcomes
 - Publications
 - Attendance at graduate school
 - Demographics
- Means of measuring student growth/satisfaction with program
 - Exit survey
- May want external assessment expert