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 PUls
- 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