

## Grant Writing and Application Process

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## Information Sources

- Faculty from CS, Math and CCT
- NSF webpage
- NIH webpage
- LSU Office of research and graduate studies webpage

## Objective

- Overview of grant writing process

## Aim

- Step 1: To develop research ideas
- To convince grant reviewers (strangers) that your idea would have a great impact
- To convince the funding agency to invest their money in what you think is important
- To communicate clearly

## Terminologies

- Grant – Funds (money / resource) to support a project over a period of time
- Funding Agency – An institution who sanctions money as grants
- Proposal – A written document submitted to the funding agency stating the research plans, strategies, milestones and budget
- Award – The money!

## Some Funding Agencies

- NSF (<http://www.nsf.gov/funding/>)
  - National Science Foundation “Where Discoveries Begin”
- NIH (<http://www.nih.gov/>)
  - National Institutes of Health
  - <http://grants.nih.gov/grants/oer.htm>

## Eligibility

- Each grant program usually has its own requirement
- Requirement on 3 categories:
  - Individual Eligibility
  - Institutional Eligibility
- Foreign Eligibility (usually with US collaboration)

## NSF grant proposal guide

- [http://www.nsf.gov/pubs/policydocs/pappguide/nsf08\\_1/gpg\\_index.jsp](http://www.nsf.gov/pubs/policydocs/pappguide/nsf08_1/gpg_index.jsp)
- Types of submissions
  - Letter of Intent
  - Preliminary Proposal
  - Full Proposal
- Adhere to DEADLINES!!
- Follow requirements and ELIGIBILITY

### People involved

- PI (Principle Investigator) – in charge of overall research; Usually a full-time faculty.
- Co-PI – Other faculties
- Post-doctoral students
- Graduate Students
- Other staff – for production-level infrastructure development
  - Example – LONI
- Preference: Better research opportunities for women, African Americans, other races

### Proposal Content

- Cover Sheet
- Project Summary
  - Intellectual Merit
  - Broader Impact
  - Project Description
- Purpose of Study
- Body
  - Design Idea
  - Goal
- Budget
- References
- Time
  - Period of project
  - Milestones
  - Deadlines
- Deliverables
  - Infrastructure
  - Published papers
  - Research
- Resume of PI/Co-PI/others

Thank You!

- Highlights after talking to faculty

### Pearls of Wisdom

- Selecting the correct program
  - Submitting your application to the appropriate grant program
- Research on requirements - Important

### Eligibility

- Technical requirements and limitations
  - Content
  - Page limits
  - formatting
- Budget requirements (max budget)
- PI requirements (maximum number of submission as a PI)
- Institutional requirements(max number of submission from an institution)

### Expressing Ideas

- Intellectual Merit
- Broader Impact

### Proposal includes

- The new idea
- Research Plan and timeline
- Management Plan
  - Roles
  - Communication and training (especially if there are more than one PI)

### Institutional facilities

- Support from your institution
  - Management
  - Administrative
  - Technical

### Support letters

- Collaboration letter (not recommendation)
  - Saying that they will benefit from the project /research
  - Will collaborate, work together
  - User support Letters

### Management is Hard

- Multi-institutional
- Multi-diciplinary
- Multi-PI
  
- Funding agencies favor multi-institutional applications

### Which one to apply?

- Eligibility
  
- Funding

## Asst. Professor

- Funding
  - In research schools
  - At least 2,3 external findings from NSF
- Funding – Research (tightly coupled)
- Funding, and Publications

- Thank you!