Grant/Proposal Writing Training Workshop

@ The University Auditorium, Ajayi Crowther University (ACU), Oyo.

Oyeronke A. Odunola
Professor of Biochemistry &
Director, Research Management Office
University of Ibadan, Ibadan.
OBJECTIVES

- Provide a basic overview and review of the grant-writing process
- Sensitize a cadre of mentors that can provide assistance to the early career researchers
- A guide to early career researchers
- Increase the number and quality of applications for grants and research outputs
Terminologies

 Guru Grant: funds to support a specific project
 Guru Award: a recognition; may have a “grant-like” component
 Guru Grant proposal or Proposal or Submissions: a written document (a request) submitted to an agency to obtain money or resources (a grant)
 Guru Grant writing: the act of completing an application process for funding
The Job at Hand for the Researcher

To convince a group of strangers to give you their money to carry out an investigation that you believe is important

How successful you are depends upon your ability to communicate the need for and the quality of your research

“It’s easier to find funding for a great idea than to find an idea for great funding”.

(- Author Unknown)
Research Idea for Great Funding

- Research idea is very critical
- What stage is your career?
  » Beginner?
  » Established?
The Early Career Researcher

Six Competencies Needed for Career Success

- Knowledgeable in the chosen field
- Communication Skills
- Professionalism
- Management and Leadership Skills
- Responsible Conduct of Research
- Research Skill Development
Planning Your Career

- What are your goals?
- Where do you want to be in 5, 10, 15 years time?
- Who do you want to work for?
- Which field of research will you work in?
Research Landscape

As a researcher, you have unprecedented access to:

- Information
- Analytical tools
- Collaborative Networks
- Facilities
- Increased competition for funding opportunities

The result:

Without mentoring and guidance, you are at greater risk of reduced productivity and unnecessary career detours.
Guide to Early Career Researcher

- Career Planning
- Select a Research Discipline Area
- Select a Supervisor
- Select a Mentor
- Research Collaboration & Networking
- Research Ethics
- Choose where to Publish, Publishing Style & Format
Guide to Early Career Researcher

- Prepare a Grant Funding Application
- Collaboration with Industry and Academia for Research Output translation & Uptake
- Attending Conferences
- Society Memberships
- Selling Your Accomplishments & C.V.
- Applying for Fellowships
- Applying for a Job or Promotion
The Seven (7) Sections of a Grant Proposal

- The Executive Summary
- The Narrative
- The Needs Statement
- Program Design
- Management Plan
- Evaluation Plan
- Budget
1. The executive summary

- An abstract of the grant proposal.
- Should be brief, usually one page, overview of what is contained in the grant proposal.
  - Statement of significance
  - Hypothesis and research questions
  - Methods and analyses
- It should be written last, after all the other parts of the grant proposal are assembled.
- Some reviewers may see only this
2: The Narrative

- Describes the organization/team/person making the request.
- Describes in details the organization's/team’s/person’s history and major accomplishments.
- The reviewer of a grant proposal is looking to determine that the organization is well established.
- Additionally, reviewers look for "value association." i.e. does the applicant organization's mission align with the funder's values or mission?
3. The needs statement

❖ Heart of the grant proposal
❖ The applicant proves that the request is both plausible and reasonable. Why the research is important
❖ This is the section of the grant application where that will be spelled out in detail. Good and precise literature review. Documents solid theoretical basis for the study
❖ The mission of the applicant should be realized here and that mission should align well with the philosophy of the funder.
4. Program Design

- The needs statement of a grant proposal is put under the funder's microscope.
- Specific goals and objectives State long term objectives
- **Goals** are the program's aspirations
- **Objectives** are the measurable, quantifiable steps or benchmarks required to reach that goal.
- There must be at least one objective for every goal and a timeline for each objective.
- Each objective should be SMART: Specific, Measurable, Attainable, Realistic, and Time-bound (Browning BA 2009)
- Limit hypothesis
- Make a concise outline of entire project
5. Management plan

- Explains how the plans, goals, and objectives will be staffed (i.e., personnel)
- Who has responsibility for the line of accountability
- Who will troubleshoot the program
- What the facilities allocation is, etc.
- This part of the proposal should include the number of personnel, materials, timeframe, and other key resources needed for the project’s implementation.
6. Evaluation plan

维奇 Shows the funder how the organization plans to collect data to measure the progress of the project's objectives.

维奇 All objectives must have measurement outcomes. The evaluation must give emphasis to the effects and benefits of the organization's project to strengthen its worth for funding.

维奇 There are two kinds of evaluations:

维奇 **Summative evaluation**: A summative evaluation is done at the start of the project. Its aim is to assess how the listed activities can meet the objectives of the program.

维奇 **Formative evaluation**: A formative evaluation, on the other hand, assesses the project during and after its implementation. Obviously, a summative evaluation is the type included in a grant proposal.
7. Budget

- Gives a detailed accounting of how the applicant(s) plans to use the funder's grant monies or resources.
- Usually separates the administrative from operational costs.
- Different granting agencies have very different formats for the budget proposal; some provide their own budget forms while others require specific formats.
- The budget shows how well the applicants can generate a compelling account that serves the wishes of the applicant organization while satisfying the needs of the granting organization.
- Please note: There are many variations to budget format and details required.
Tips and Traps

• Know the agency and what the agency is looking to fund?

• Sell yourself and the project. Excite the reviewer in the first page. Original, wow factor, impact.

• Clearly identify the problem, theoretical basis, good model system for testing hypotheses

• Preliminary data

• Follow all of the rules (Grant Proposal Guidelines)

• Allow enough time to fix errors and have informal reviews
Style is important

- Make the proposal a “pleasure to read”
- Follow the rules on font size, line spacing, margins
  12 point Times New Roman, don’t skimp on white space
- Use headings, bold, indents, figures, flowcharts, timelines
- Cite references accurately
- Spell and grammar check
- Get letters of support if collaborators involved
- “Your proposal may state what you will do, but it shows what you can do”
Preparations

- Talk to program officer if possible
- Determine the funding objectives of the agency
- Read successful proposals (abstracts may be posted online at agency website)
- Read directions and guidelines carefully
- Allow enough time for informal reviews
- If declined, consider resubmitting
Types of Grants

- Federal: Solicited and non-solicited throughout year
  - NIH
  - CDC

- Private
  - Gates Foundation
  - FHCRC

- Institutions
Who gets NIH grants

- Grants are made to organizations
  - i.e. universities, research groups, individuals, NGOs)

- Most organizations qualify for research grants
  - Available to foreign institutions
  - US affiliation or citizenship not required for most funding
    - Extra review step
# Classes of Grant Award Mechanisms

<table>
<thead>
<tr>
<th>Award Class*</th>
<th>Description</th>
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<tbody>
<tr>
<td>T series – research training grants F series - fellowships</td>
<td>Pre- or postdoctoral training awards to institutions who award them to trainees</td>
</tr>
<tr>
<td>K series – research career awards</td>
<td>Awarded to institutions or individuals; Junior faculty development</td>
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<tr>
<td>R series – research grants</td>
<td>Research grants for projects proposed by PI</td>
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<tr>
<td>P series – program or center grants</td>
<td>For senior investigators</td>
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<tr>
<td>U series – cooperative agreements</td>
<td>For senior investigators</td>
</tr>
<tr>
<td>Conference grants</td>
<td>Support scientific conferences</td>
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* Foreign eligibility varies by Institute but generally US citizenship is required for some T, F, and some K award classes.
What gets funded?

- Strong idea, strong science, strong application – 3S
- Likely to have high impact, new and original ideas, must have importance beyond your particular system
- Project plan focused and clear – 2-3 main objectives, lay out hypotheses with alternatives and predictions, expected outcomes, sound scientific rationale
- Knowledge of subject area and methods, current references
- Realistic amount of work (not too ambitious) and realistic budget
- Clarity about future directions
- **Broader impacts** – will be returned without review if missing
What are Requirements?

- Institution must be eligible
  - Grants.gov; eRA Commons; DUNS number
  - Other (Federal-wide assurance; offer Responsible Conduct of Research (RCR) training; animal research or radiation safety requirements; international requirements)

- PI must be eligible
  - eRA Commons username; Human Subjects Protection training; RCR training; vertebrate animal training; opportunity-specific requirements

- Trainee/Fellow must be eligible
Good grantsmanship

Title must reflect the essence and goals of the study

Show your draft application to others

Someone who does not know what you want to do.

Someone who is knowledgeable in your area of research

A colleague who is not your best friend

A mentor
Finding the right grants

- Check eligibility criteria closely
- Contact program officer
- How much money can you apply for? Is it enough?
  - Can you adapt project to meet budget?
- Geographic location
- Review projects successfully funded by that organization
Funding for student/fellow or project

- Include funding your salary/tuition/travel on project grant
- Additional grants can help fund YOU!
  - Training grants
    - STD/AIDS Training Grant
    - TL1 Clinical Research Training Grant
    - Fred Hutchinson Cancer Research Center Dual Mentor (Interdisciplinary) Fellowships
    - Many others!
      - [http://depts.washington.edu/epidem/fellowsh.html](http://depts.washington.edu/epidem/fellowsh.html)
  - Travel grants
    - Global Partnerships Travel Grant (UW)
    - Thomas Francis Jr. Global Health Fellowship (UW)

- Departmental supplementary grants
International Agencies

- The Department for International Development ([http://www.dfid.gov.uk/](http://www.dfid.gov.uk/))
- The International Development Research Centre ([http://www.idrc.ca/](http://www.idrc.ca/))
- The Wellcome Trust ([http://www.wellcome.ac.uk/](http://www.wellcome.ac.uk/))
Developing a Budget

How much will you need to carry out project?

Allowable costs
- Supplies, travel, equipment, salaries

Unallowable costs
- U.S. federal grants typically prohibit food/beverages, renovation, furniture
Budget Justification

- Concise statements about need for key equipment, personnel, supplies, and travel
- Describe any donations
  - Space, supplies, drugs,
  - Staff salaries covered by other fellowships, etc
- Level of detail depends on grant
Budget Tips

- Avoid future headaches
  - Make budget as accurate as possible
- Include all expenses – be thorough
  - Photocopying, office supplies, travel, transportation, shipment of samples, lab supplies/kits, participant reimbursement, treatment of study participants
- Ask someone in collaborative group to review
  - Hidden costs
  - Actual costs of items locally
Common problems with applications

- Topic not important enough
- Not likely to produce useful information
- Based on shaky hypothesis or data
- Method unsuited to the objective
- Too little detail in research plan
- Over-ambitious/unrealistic
- Lack of focus
- Lack of original or new ideas
- Investigator too inexperienced with techniques
- Lack of preliminary data
- Insufficient consideration of statistical needs
Thank you.