Proposal Writing
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MSU Entomology

Persuasion......

- Proposals are a special type of scholarly writing
- The purpose of a proposal is to persuade an audience that you:
  - Have a good idea
  - Should give you $$

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Research/Grant Proposals

Why?

• Form: Very Different than a manuscript!
• Purpose: Suggesting Requesting Funds
• Audience: Reviewers from varying backgrounds
• Format: Includes an Executive Summary, Introduction, Rationale, Methods, Budget, Letters of Support

• Where to begin?

Proposals

• Start with your research idea…this is the core of your proposal
  Why is it interesting?
  Who/what will it affect?
  What are its potential impacts?

• Find a compatible funding opportunity…..
  Desired outputs and outcomes compatible with above questions
  Basic vs. Applied
  Discipline centric vs. Multi or interdisciplinary

• Acquire, read and reread Request for Proposals…RFP (RFA)

Grant Proposal Sources

• Federal Government (e.g. USDA NIFA, NSF, NIH)
• Foundations (e.g. Kellogg, Gates Foundation)
• Industry (e.g. commodity groups, agricultural companies)
• University internal funding programs (e.g. GREEEN)
• COS (Community of Science) a metasite that searches 1000’s of potential funding agencies
  http://fundingopps.cos.com/

RFPs…RFAs

Organic Agriculture Research and Extension Initiative

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PART I—FUNDING OPPORTUNITY DESCRIPTION
  A. Legislative Authority and Background
  B. Program Area Description

PART II—AWARD INFORMATION
  A. Available Funding
  B. Types of Applications
  C. Project Types

PART III—ELIGIBILITY INFORMATION
  A. Eligibility Criteria
  B. Cost Sharing or Match

PART IV—APPLICATION AND SUBMISSION INFORMATION
  A. Electronic Application Package
  B. Contents and Types of Application Submission
  C. Submission Dates and Times
  D. Funding Restrictions

PART V—APPLICATION REVIEW REQUIREMENTS
  A. General
  B. Evaluation Criteria
  C. Conflict of Interest and Conflict
  D. Organizational Management Information

PART VI—AWARD ADMINISTRATION
  A. Research, Development, or Demonstration

PART VII—REGULATORY INFORMATION
  A. Program Requirements
  B. Conditional Aspects of Applications and Awards

ELECTRONIC APPLICATION CHECKLIST

FY 2010 Request for Applications

APPLICATION DEADLINE: February 9, 2010

U.S. Department of Agriculture
National Institute of Food and Agriculture
<table>
<thead>
<tr>
<th>Executive Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>• First Impression</td>
</tr>
<tr>
<td>• Typically limited to 500 words or less…</td>
</tr>
<tr>
<td>• It must communicate your idea, why it perfectly meshes with the desired outcomes of the RFA, and that your research is a wise investment</td>
</tr>
<tr>
<td>• Write this last!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Present your IDEA</td>
</tr>
<tr>
<td>• OBJECTIVES and specific HYPOTHESESES</td>
</tr>
<tr>
<td>• Background literature</td>
</tr>
<tr>
<td>• Preliminary data</td>
</tr>
<tr>
<td>• Why your idea needs to be tested/ implemented</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Where you “Sell” your idea</td>
</tr>
<tr>
<td>• Relate your idea back to the desired priorities, objectives, and outcomes of the RFP or RFA!!</td>
</tr>
<tr>
<td>• Clearly indicate how your work will impact the funding agency’s target audience</td>
</tr>
<tr>
<td>• Whenever possible use the terminology found in the RFA</td>
</tr>
</tbody>
</table>
Methods

• Similar to a methods section in a manuscript

• Provide adequate detail to convince the reader that you are qualified

• Provide how you expect to analyze data

• Describe expected pitfalls and how they will be overcome

Budget

• Where you ask for $$

• Provide ESSENTIAL information but not too much detail

• Provide the budget in a table format

• Justify your budget in a budget justification explain personnel, travel, materials, equipment and other costs

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**Budget**

Project Title: Evaluating the Importance of Visual Cues for Fruit Post Attraction to Pheromone Dispensers and Attract and Kill Devices

Project Principal Investigator: Matthew J. Grinstein

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>FY 18</th>
<th>FY 19</th>
<th>FY 20</th>
<th>Matching Funds Received*</th>
<th>Matching Funds Pending*</th>
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</thead>
<tbody>
<tr>
<td>Personnel Wages</td>
<td>$8,470</td>
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<tr>
<td>A. Research Salaries &amp; Post-docs</td>
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<tr>
<td>B. Support Services</td>
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<td>$3,050</td>
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<tr>
<td>C. Student Salaries</td>
<td>$1,000</td>
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<td>$1,000</td>
</tr>
<tr>
<td>D. Equipment, Supplies, and Publications</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$10,000</td>
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<td>$10,000</td>
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<tr>
<td>E. Travel</td>
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<tr>
<td>F. Other Direct Costs</td>
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<tr>
<td><strong>Total Personnel Costs</strong></td>
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<tr>
<td><strong>G. Indirect Costs</strong></td>
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<tr>
<td><strong>Total Budget</strong></td>
<td>$24,070</td>
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<td>$24,070</td>
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</table>

**Budget Narrative:**

Personnel Wages and Fringe ($44,335)

Funds are requested to partially offset post-graduate labor costs ($17,456) and fringe ($8,406) to manage the technical aspects of the project, and to hire undergraduate labor ($18,270) to assist in the maintenance of field trials and the preliminary evaluation of video data. We expect the project to involve at least 900 hrs of undergraduate labor per year at $10/hr (3% wage increase in year 2).

*Matching Funds:* An additional $4,500 for undergraduate labor support will be available from a sister project pending with the Michigan Apple Committee.

Materials, Supplies and publications ($12,000)

A total of $8,000 is requested to assist in the purchase of field video recording equipment including: DVR's, Cameras, hard drives, cables, lenses, deep cycle batteries, digital timers, solar panels, field enclosures. An additional $3,000 is requested to assist in the purchase of custom loaded pheromone lures (estimated at $2000), hardware for visual model and trap creation and insect collecting supplies. $1000 is requested to support page costs.

*Matching Funds:* An additional $5,500 of materials and supplies support will be available from a sister project pending with the Michigan Apple Committee.

Travel ($3,718)

Travel expenses for this project will be significant with each field trip costing approximately $100 (200 miles RT x $0.50/mile). The requested $6,000 (over two years) will pay for approximately 60 field trips.

*Matching Funds:* An additional $1,540 of travel support will be available from a sister project pending with the Michigan Apple Committee.
Appendices

- **Letters of support:** solicit these from collaborators not listed as PIs or politically important figures
  - Farmers, scientists, business owners, commodity group leaders
- Additional figures, materials as allowed by the RFP

Proposal Timeline

- **October 10:** Choose topic
- **October 22:** Proposal Presentations & Written Proposals Due

**ENT 479 Proposal Elements**

- **Title Page**
  - project title
  - project team
  - executive summary (500 words or less)
  - key words
- **Introduction**
- **Rationale**
- **Proposed Methods/Activities**
- **Literature Review**

**ENT 479 Proposal Elements**

- **Title Page**
- **Introduction**
  - Project goal
  - Past work
  - Project objectives/hypotheses
- **Rationale**
- **Proposed Methods/Activities**
- **Literature Review**
ENT 479 Proposal Elements

• Title Page
• Introduction
• Rationale
  • How will the project address issues of sustainability surrounding the target food system/s?
• Proposed Methods/Activities
• Literature Review

ENT 479 Proposal Elements

• Title Page
• Introduction
• Rationale
• Proposed Methods/Activities
  • activities
  • expected outputs
  • project member roles and role of cooperating organization
  • pitfalls
  • timeline
• Literature Review

• DO: Follow page limits and formatting requirements EXACTLY!!
• DO: Use concise declarative sentences
• DO: Use phrases and language from the RFA whenever possible, especially in the rationale
• DO: Exactly follow the format provided in the RFA and use the provided headings and subheadings whenever possible
• DO: Use figures and tables where appropriate
• DO: Solicit reviewers from both inside and outside your home discipline
• DO: Learn as much as possible about the review process and probable source of reviewers (Disciplines? Farmers? Foundation CEOs?)
• AVOID: Abbreviations and jargon whenever possible
• AVOID: Filling up every last square inch of paper
• AVOID: “Overbudgeting”

• Which of these statements is a well written objective?

“To test organically and conventionally managed soils to see if organic matter is higher in the latter.”

“To determine whether there is a difference in soil characteristics between conventionally and organically managed soils.”