Components of The Project Idea

• What do you want funding to do?
• Why is it worth doing and even important?
• What benefits and results do you expect?
• How much money do you need?

The Promise of This Workshop

• Equip you to find funding for your great idea or project
• Help you prepare proposals with better than average chances for funding
• Provide some proposal-writing strategies and tips
• Help you navigate Montana Tech’s proposal processes

➢ The MOST IMPORTANT “TAKE-AWAY:” Always read and follow the instructions!

GRANTS Can Help Advance YOUR Goals & Montana Tech’s

• Be a national leader in providing transformative undergraduate and graduate education.
• Support and grow research, scholarship, and technology transfer.
• Be responsive to the needs of industry, our community, and our state.
• Improve the visibility, recognition, and reputation of Montana Tech in the state, nation, and world.
• Secure resources that support excellence.
• Create a culture and workplace environment that embraces excellence.

➢ Proposals contributing to strategic priorities are more fundable
The Funding Process Simplified

- Grantees want money
- Sponsors and Donors have money they want to give away
- Sounds like a perfect match, except:
  - Demand exceeds supply ⇒ sponsor’s market
  - Funding usually comes with strings attached

How Does It Typically Work?

- People write proposals to obtain funding that allows them to develop a specific project
- Sponsors review proposals and fund projects and grantees judged to be the BEST
  - Best means ones most likely to accomplish something THE SPONSOR wants done,
  - Best means most likely to result in some benefit desired by THE SPONSOR
- What's in it for grantees? Money
- What's in it for sponsors? Advancing their agenda or image

Grants are Not Blank Checks

The Faustian Bargain: if you accept the money
- You must do what you proposed and what the sponsor wants and expects
- You must satisfy the sponsor's accountability requirements
- You must obey Montana Tech's processes and procedures
- Frequent communication with the sponsor is a very good idea
- Don’t write a proposal if you don’t want to do the project and satisfy the requirements

Finding a Promising Funding Source and Sponsor: Outline

- Seek a funder which has a good match or fit with your project
- Types of funders: public & private
- The “fit” is key
  - It is YOUR JOB to understand the funder
  - Your proposal must emphasize the “fit”
- Resources for finding funders
Seek Funder-Project Match

- Shared mission and goals
- Shared constituency
- Common core values and “culture”
- Similar image, motto, vision
- Shared "market"
- Interest in product or result

Types of Funders

- Public
  - Federal government agencies
  - State or DC government
  - Local government
- Private (everything else)
  - Foundations
  - Corporations and businesses
  - Professional and trade associations
  - Service clubs
  - Individuals

Public Sponsors

- Advantages
  - Lots of money; often make large grants/contracts
  - Purpose set by legislation
  - Likely to cover all costs, including overhead
  - Known application process, criteria, deadlines
- Disadvantages
  - Bureaucratic, often requires cost sharing
  - Reviewers favor experienced applicants, low risk
  - Proposals are long, often many stipulations
  - Programs rise and fall with political winds
  - Many requirements and therefore, higher cost
- Easy to find using grants.gov (federal) and public information for state/local agencies

Private Sponsors

- Advantages
  - Usually less bureaucratic and more flexible
  - Welcome innovative proposals, emerging issues
  - Proposals often simple, short
  - Can help leverage large public grants, provide non-cash support
- Disadvantages
  - Smaller grant size
  - Priorities can change rapidly
  - Processes, policies, and procedures less defined
  - Review/approval process less “transparent”
  - Often will not pay all costs or overhead expenses
- Easy to find and research using the Foundation Center resources in Montana Tech’s library
The "Fit" is Key

- The “fit” between your idea/project and the sponsor's interests is key
  - Learn as much as possible about the sponsor
    - What projects have been recently funded?
  - Know the eligibility requirements
  - Know the selection criteria
  - Understand the selection process
  - Know and address any special requirements
- Make sure the proposal clearly demonstrates how your project satisfies sponsor's criteria and requirements:
  - Who has the money, writes the rules!

It's Your Job to Understand the Funding Agency

- History, mission, and purpose
- Geographic service area and population served
- Current programs and future plans
- Size and purpose of grants
- Rules and guidelines
- Background and experience of staff
- Where its money comes from
- Its competitors and collaborators
- Any special connections with you or UDC

Resources for Finding Funders

- Federal Agencies: http://www.grants.gov
- The Foundation Center: http://www.foundationcenter.org
  Montana Tech Library is a Cooperating Collection!
  Montana Tech Library has a subscription
- GuideStar: http://www.guidestar.org
- Web pages of specific funders (government and private) often show opportunities AND abstracts of all awarded grants
  - NSF Awards database
  - NIH CRISP database

Advice for Contacting Funders

- Do contact them, but do your homework FIRST
  - Follow their guidance
  - Make a good first impression by planning well
    - Get to the point and make it short
  - Cultivate a relationship
- Follow their rules when you apply
- Do not contact immediately after the deadline
- Send thank-you notes
- If funded, keep the sponsor informed
- If not funded, request feedback
Elements of Grant Success

- Good ideas
- Good timing
- Good presentation
- Good reviewers
- Good luck
- Good grantsmanship

Good Idea

- Significant?
  - Does it address an important problem?
  - How will knowledge or well being be advanced?
  - What impact could it have? Who will benefit?
- Innovative?
  - How does it build upon or expand knowledge base?
  - How will it make a difference?
  - How is it unusual, novel, or breaking new ground?
- Achievable?
  - By your team— with its infrastructure and resources
- Broader impacts?
- Understandable?

Requests for Application (RFA) and Program Announcements

- If the sponsor publishes a request for application (RFA) or program announcement, READ IT CAREFULLY!
  - Announcement describing an initiative of the sponsor/agency
  - May invite applications for a one-time grant competition on a special topic
  - Sometimes designates an amount of funding for a certain number of awards
  - Will specify any special priorities or review criteria
- NIH often uses RFAs

“Unsolicited Proposals”

- Many sponsors accept and fund unsolicited proposals in addition to proposals submitted in response to a major program announcement
  - National Science Foundation only issues program announcements for major, cross-cutting, or specially focused proposals
  - Most NSF grants are awarded to unsolicited research proposals, which are evaluated through an annual or semiannual review cycle
- There are fewer special requirements for unsolicited proposals
- Unsolicited proposals often have higher success rate
Good Timing

- Will the idea be understood by others?
- Does it build upon current knowledge?
- Does it build on related ideas?
- Do you have preliminary data?
- How will the idea be understood and received by experts in the area?
- Is the deadline far enough away that you could create a thorough and clear proposal?

Good Presentation

- Well organized
- Clearly describing:
  - What you want to do?
  - Why you want to do it (importance and benefits)?
  - How you plan to do it?
  - How you know you are capable of success?
  - What is the expected outcome?
  - What are other (broader) desirable impacts?
  - How will it help the sponsor accomplish its mission?
- Clearly connecting to the mission or priorities of the funder and/or to a specific RFA
- Easy to read: font, layout, grammar

Typical Selection Criteria

- Quality and soundness of project approach: goals, outcomes, activities, plans
- Need and potential impact
- Budget
- Performer capability: ‘proof’ you can succeed
- Plan for the future (sustainability or follow-up)
- Evaluation methods and plan

  THESE ARE SPECIFIED BY THE SPONSOR AND IN THE PROGRAM ANNOUNCEMENT, IF APPLICABLE

Read, Re-Read & FOLLOW the Guidelines

Good Reviewers

- Reviewers are selected by the sponsor, because they are good reviewers
- How you write your proposal can make the reviewers good for YOU
- Organize and present proposal to make reviewers HAPPY
  - Easy to understand
  - Easy to find things
  - Easy for them to evaluate how the proposal fares against the selection criteria
  - Easy for them to be your advocate in a review panel
  - Don’t make them work hard: They have lots of proposals to read and represent! Plus usually a ‘day job’
Reviewers and Grant Managers are People Too

- Personalities and networks
- Knowledge
- Interests
- Tastes
- Learning style
- Fears and biases
- “Marching orders” and job description

- Know and talk to grant managers and to people, who frequently serve as reviewers
- Volunteer to be a reviewer—the best way to learn!
  - Serving on Montana Tech’s Seed Grant Committee or Undergraduate Research Committee would be a good start

Good Grantsmanship

- Understand the sponsor’s mission
- Understand its review process (typically a form of peer review)
- Obtain collaborators or partners that complement your expertise and strength
  - In RESEARCH and SERVICE: there are no competitors, only potential partners & collaborators
- Grant writing, like writing papers for publication or creating works of art, is a learned skill
- Grantsmanship takes time and avoids corner-cutting
  - Plan ahead to avoid last-minute rush and sloppiness

- YOU CAN BE IN CONTROL!

The Grant Cycle

- Sponsor issues solicitation or prospectus (sometimes)
- Applicant learns about sponsor and prepares and submits proposal
- Sponsor or peers review/evaluate proposals
  - "Best" proposals selected for funding
    - Sometimes after negotiation & budget/scope adjustment
    - Other proposals rejected or deferred
- Funded grantee does the work
  - Cultivating strong relationship with sponsor
  - Satisfying sponsor's requirements
- Grantee completes project work, closing budgets and submitting final report

The Grant Cycle

1. Idea & Opportunity
2. Find Sponsor & Opportunities: Maybe find RFA or prospectus
3. Learn about sponsor
4. Evaluate & Report
5. Submit technical & financial reports
6. Do the project well
7. Write & Submit Proposal
8. Read & follow guidelines; address selection criteria; coordinate with Research Office & OSP
9. Sponsor reviews proposal and decides
10. Award
11. Performance
12. Award
Developing the Proposal

- What do you want to do? The project idea
- Why is it worth doing and even important?
- How do you plan to do it? The approach
- What benefits and results do you expect?
- Who will do it and what are their qualifications?
- How much money do you need?
- WHILE YOU ANSWER THESE QUESTIONS, FOLLOW THE GUIDELINES!

Sources of Information

- Friends, colleagues, proposing organization, other organizations
- Journal articles and publications
- Library
- Databases
- Internet
- Abstracts of recently funded proposals by your prospective sponsor
- Other...

Design the Approach

- Brainstorm many alternative approaches
- Evaluate each, select (or create) the best
- Optimize and develop the plan
- Criteria for selection and optimization
  - Feasibility and effectiveness
  - Suitability and match to applicant, funder, community, available infrastructure
  - Uniqueness
  - Anticipated impact
  - Utility, practicality, sustainability
  - Cost effectiveness, schedule

How Can You Accomplish the Project?
Planning the Grant Writing

• When do you want to start the project?
• What grant-submission deadline must you meet?
• Is the plan/project clear? Does it need development?
• What are the selection criteria?
• What information is needed for the proposal?
• What do you need? From whom? How will you get it?
• Do partnerships need nurturing? Support letters?
• What review do you want/need before submitting?
• How will you fit the time to work on the proposal with your competing obligations?
• How will you divide the proposal preparation among team?

Make a Plan and Schedule

<table>
<thead>
<tr>
<th>[PROPOSAL TITLE] PREPARATION PLAN</th>
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<tbody>
<tr>
<td>Task or Deliverable</td>
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<tr>
<td>Proposal requirements</td>
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<tr>
<td>Review Criteria Summary</td>
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<td>Summary/Abstract</td>
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<tr>
<td>Narrative</td>
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<td>Vision/Mission/Goals/ Hypothesis</td>
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<tr>
<td>About MTech, if appropriate</td>
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<td>Approach (The major body of the proposal)</td>
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<td>Major Section 1</td>
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<td>Major Section 2</td>
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<td>etc.</td>
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<td>Management Plan</td>
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<td>Budget</td>
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<td>University Commitment?</td>
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<td>Bio for Key personnel?</td>
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<td>Support letters</td>
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<tr>
<td>List each sender</td>
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<td>Current and Pending Support</td>
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<tr>
<td>Create or Upload Application</td>
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<tr>
<td>Coordinate PCF</td>
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Parts of a Proposal (Typical)

• Cover letter, title page, abstract or project summary: introduce the project, performer, and amount requested
• Problem statement & context: problem addressed; who cares & why? Goals, aims, hypothesis, if applicable
• Project description: goals, objectives, and approach
• Evaluation plan: how will outcomes be measured?
• Future plans: how will work continue after grant is over?
• Applicant capability: evidence applicant can succeed
• Budget: table & narrative explaining budget details
• Supporting material: letters of support, bios, audited financial statement, other documentation funder requires

Budget Realities

• Projects can fail, if they do not have enough money
• No matter how much money is provided, it is possible to overspend and get in trouble
• The more money you ask for, the harder it is to get funded
• The best approach is to request the amount of money you need, if you manage frugally and carefully
• And then to manage frugally and carefully, if you are funded.
Envision your budget

- Before you start with a spreadsheet:
  - Think about your project
  - Think about what you need to accomplish your project
- What can you live with, what can you live without
  - Do you need the personnel or travel funds, or can you do without them?
  - Do you need the equipment?
- Will you have ENOUGH budget and resources to succeed?
- How can the project and its budget advance larger Montana Tech agendas?
- When you know what you need, work with Carleen Cassidy to develop the final budget, in compliance with Montana Tech’s policies

Be Sure to Follow Montana Tech’s Proposal Process

- Alert your department head, dean, & Research Office AS SOON AS YOU DECIDE to work on a proposal
  - Let them know if you need assistance of any kind
- Plan the proposal writing and engage collaborators and supporters early
  - Enlist colleagues to review proposal before it is finalized
- Work with OSP (Carleen Cassidy) on budget early
  - Arrange for required or desired match, including approval from dean, OSP, and VCR
- Submit the Proposal Certification Form (PCF) along with the near-final proposal to Research Office for final review at least 7 days before the submission deadline
  - After review and approval by dean & department head

Guides for Grant Writing

- [http://www.hfsp.org/how/ArtOfGrants.htm](http://www.hfsp.org/how/ArtOfGrants.htm)
  - Website with excellent guide on how to write proposals
- The Foundation Center’s web site has many resources for individuals seeking grants
  - [http://www.foundationcenter.org](http://www.foundationcenter.org)
  - Montana Tech’s Foundation Center collection is located in the Library
- Montana Tech’s research policies are on line:
  - [http://www.mtech.edu/research/policies_procedures.htm](http://www.mtech.edu/research/policies_procedures.htm)
  - Contact Research Office for additional proposal leads
- Guidelines available at [http://www.mtech.edu/research/policies_procedures.htm](http://www.mtech.edu/research/policies_procedures.htm)
- Finalize your proposal and submit to Research Office at least 7 days before the deadline
- People who READ and FOLLOW the directions are much more likely to be funded than those who don’t!

Final Words of Advice

- Get started early
- Be sure to read, re-read, and follow the sponsor’s guidelines
- Be sure to read, re-read, and follow Montana Tech's guidelines
- Guidelines available at [http://www.mtech.edu/research/policies_procedures.htm](http://www.mtech.edu/research/policies_procedures.htm)
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