

Funding Your Ideas:

Writing grants to obtain external support for
research, scholarship and creative activities

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UNIVERSITY OF
ILLINOIS
SPRINGFIELD

1. Finding Funding
- 2. Tips for Success**
3. Applying for Grants

University of Illinois at Springfield



Writing successful proposals

- Collect & read successful proposals
- Follow program guidelines carefully
- Communicate the *intellectual significance* and *broader impact* of your project
- Demonstrate that your plan is workable:
 - 3 goals with measurable outcomes
 - Present preliminary results or highlight a previous project
 - Clearly explain roles & expertise of project personnel

Proposal Writing Tips

DO:

- Follow directions
- Learn as much about your funder as you can
- Use language that is simple and direct
- Repeat the funder's language back to them
- Include tables, flowcharts and diagrams when they are useful

Tips continued ...

- Proofread
- Have someone not familiar with your work read your proposal
- Prepare a detailed and justifiable budget
- Talk to staff at the funding agency if possible

Tips continued...

DO NOT:

- Go over the number of pages allotted
- Pad your budget with items that can't be justified
- Assume that reviewers are experts in your field
- Wait until the last minute – to write or to submit
- Send the same proposal off to multiple funders
- Get discouraged!!

What to do if your project is not funded

- Read reviews carefully / ask for feedback
 - Common problems:
 - Project does not match grant program (topic, scope, type of award)
 - More information needed to evaluate workability of plan (methods, budget, timetable, personnel)
- Be prepared to revise
 - Add personnel? Clarify goals or methods? Explain significance more fully?
- Seek internal funding to develop preliminary results
- Keep trying

KED Grant Proposals Written 2000-2006

Agency and Program	Proposal Title	Amount Funded
The Camille and Henry Dreyfus Foundation	Photochemistry of Confined Transition Metal Complexes	\$10,000
Research Corporation	Self-assembly of Gold/ Zr(HPO ₄) ₂ Nanocomposites	denied
Council on Undergraduate Research	Self-assembly of Gold/ Zr(HPO ₄) ₂ Nanocomposites	\$3,500
UIS Summer Competitive Scholarly Research Award	Self-assembly of Gold/Zirconium Phosphate Nanocomposites	\$1,500
The National Science Foundation Major Research Instrumentation	RUI: Acquisition of a Powder X-ray Diffractometer	denied
American Chemical Society	Decorating the Gallery: Improving the Properties of Cobalt Hydroxide by Anion Intercalation	denied
Research Corporation	Self-assembly of Gold/ Zr(HPO ₄) ₂ Nanocomposites for Optical Applications	denied
UIS Summer Competitive Scholarly Research Award	Intercalating Anions into Cobalt Hydroxide	\$1,000
American Chemical Society	Nanometal Pillaring of Inorganic Layered Compounds	denied
Research Corporation	Mesoporous Transition Metal Oxides for Energy Storage	denied
The National Science Foundation Course, Curriculum, and Laboratory Improvement Program	Integration of Powder X-ray Diffraction Throughout the Chemistry Curriculum	denied
American Chemical Society Petroleum Research Fund	The 2D to 3D Magnetic Ordering Transition in Layered Double Hydroxides Mediated by Polyoxyometalates	denied
NCUR/Lancy Initiative Summer Support for Exceptional Undergraduates	Research Community for Water Literacy: Chemistry, Biology, Environment, and Policy	denied
Research Corporation	Porous Heterobimetallic Oxides for Energy Storage	\$33,494
The National Science Foundation Course, Curriculum, and Laboratory Improvement Program	Collaborative Project Gemini XRD: Powder X-ray Diffraction in Undergraduate Chemistry Courses	\$92,179
The National Science Foundation Course, Curriculum, and Laboratory Improvement Program	Upgrading undergraduate education by the acquisition of a Gas Chromatograph-Mass Spectrometer (co-PI with Dr. Harshavardhan Bapat)	denied
Merck/AAAS	Undergraduate Science Research Program	\$60,000
The National Science Foundation Course, Curriculum, and Laboratory Improvement Program	Collaborative Project Gemini SPM: Scanning Probe Microscopy in Undergraduate Chemistry Courses	\$74,895

Help for Writing the Proposal

- Volunteer to serve as a proposal reviewer for the agency
 - You make contacts and learn first-hand about the grants that get funded
- Pre-“peer review”
 - Send a copy of your proposal to a colleague *before* the submission deadline

Start Now

- Set goals and deadlines for yourself
- Apply to one of the internal UIS grant programs
 - Gain experience in proposal writing
 - Get resources to obtain preliminary results
- Don't wait
 - Submit a proposal and get feedback.
 - Some programs give preferences to new faculty.

<https://blog.grants.gov/2017/06/14/grant-writing-basics-3-tips-to-avoid-last-minute-problems/>

Suggestions for Success

- Establish a track record with peer reviewed publications
- Gather preliminary data on the project to demonstrate that you can do it
- Show institutional support
 - List all available resources even if you haven't tapped into them yet.
- Find collaborators
 - Colleagues down the hall, at another campus
 - Attend professional conferences

Finding Time for Research

- Schedule your academic week into blocks for teaching and research
 - reserve a day, or at least an afternoon, to your scholarship (no meetings, no committees, no classes)
- Reserve summers for research
- underload/overload semesters
 - Since a contact hours are counted for the entire year, you can underload one semester to make time for writing.
- Course-related research can lead to published articles