

GUIDE TO FEDERAL GRANTS AT ANOKA-RAMSEY COMMUNITY COLLEGE



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Introduction

Reason for this Guide

Writing your first federal grant can be a daunting prospect for any two-year college faculty member, but the rewards in terms of contribution to your students, your institution, and your field can be immense. I wrote and directed a successful National Science Foundation grant that was an incredibly rewarding, but also challenging experience. My hope is that in sharing what I learned through both triumph and trials will provide support and guidance to ARCC faculty interested in submitting a proposal for external funding.

This guide includes suggestions, tips and resources that will hopefully make the experiences of future faculty writing and administering grants, staff helping manage grants, and administrators overseeing grant operations easier. I believe this will be achieved by:

1. Giving faculty a clear understanding of the general expectations ARCC has for Principle Investigators/project leaders.
2. Detailing the support available to faculty at ARCC as they write, submit and administer grants.
3. Giving faculty an idea of the time commitments over the course of a grant based on my experience.
4. Providing tools like flow charts and checklists based on my experience to guide development.
5. Providing examples/scenarios, where possible, to help faculty consider how a project might actually play out.

How to Use this Guide

I have tried to arrange the information in this document into major topics within the main phases of the grant process: writing/submitting and administering. My recommendation is to focus on the sections based on the phase you are currently in. I have included references to other sections that might be relevant as needed.

Navigation hints: Where possible figure, tables and references are directly linked to the location in the document when discussed. If you hold “Ctrl” and click the “Figure #” it will take you to the noted figure. If you hover over the reference number, you will see the text of the reference or you can double click on the reference to be taken to the citation. For example try [Figure 1](#) and the superscript reference here.¹

Preparation for and Writing of Federal Grants

Writing a successful grant proposal is a complicated process with many moving pieces and often many different contributors. Like any such process, however, it can be accomplished by taking things in smaller pieces and giving yourself enough time to complete each step. This section will break out the main requirements, tasks, and processes needed to successfully submit a federal grant. The following breakouts attempt to collect some of the major pieces you should have in place before starting to write a grant.

The Idea: It is likely that you feel this is a “no-brainer” if you are thinking about writing a grant, but I want to address a few aspects that you may not have thought about and give a framework to assess your idea.

- The first criteria to consider is that you should be passionate about the idea or solving the particular problem you want to address. You will be putting in significant time and effort often outside of your regular “working” hours, so passion for your work will be required to keep you motivated.
- Be sure your idea is **S.M.A.R.T.** This acronym can be used to help avoid some common pitfalls in working on goals/projects in the initial stages before other grant requirements necessarily add additional layers of assessment/complexity.
 - **S** is for **specific**: Do you have a clearly-defined study or endpoint that sets the endpoint of your project? E.g. “Three sections per year for 2 years will participate in this activity and their understanding will be assessed using the *Somebody-Someone* test.”
 - **M** is for **measurable**: What tools, surveys or instruments are available or will you develop to measure progress/completion of your work? E.g. in the fictitious example above the *Somebody-Someone* test would be the instrument used to measure progress.
 - **A** is for **attainable**, Can the work you propose actually be completed in the timeline available for the funding opportunity? E.g. is it likely 3 sections per year will run in your course? Is 2 years enough time to statistically analyze your results with reasonable confidence?
 - **R** is for **relevant**: Is your proposed work important in context of your field and addressing a problem/question of consequence? E.g. the number of chemistry majors who like the color blue is a question that could be asked but is of no consequence in my field.
 - **T** is for **timely**: Is now the right time to work on this question? Can you make enough progress in your program to move your field forward? Is this project sustainable beyond the grant period (if relevant)?
- Funding agencies like the NSF are often very interested in ensuring the projects and centers they provide funds for make a lasting impact on the field or technology of interest. Consider how to generate concrete items, procedures, or methodologies that can be sustained by your institution or field with minimal financial commitments. Alternatively, identify a funding source for continuations of your project beyond the grant period. In my grant we generated several assignments and videos that we can still use without need for funding beyond classroom printing costs.

The Team: Choosing who you work with is an important step to making a grant move forward smoothly. Identifying roles, expectations and ensuring common understanding among team members up front will save headaches later in the process when you are busy doing your project and collecting data. Don’t be afraid to look to other public or private institutions for people with the expertise, temperament, and reliability you need to be successful. Sub-awards are common and collaborative proposals are often viewed as desirable. You could also potentially leverage the grant experience and procedures of collaborators to help support your efforts.

Time: Writing a grant and completing all the processes required by the college and funding agencies takes significant time. As such, you will need to start your process early enough to give time to complete items without too much of a “last minute rush.” I recommend starting at least 1 year prior to your expected submission date unless you have significant background information assembled or happen to be writing on a sabbatical semester.

Resources: It is important to assess what you have available to help develop and write your grant proposal. Efficient use of your resources can save much time and frustration as you work through the process. You might see if your chosen funding source has web-based activities, archived seminars, or even in-person meetings to help potential applicants. You can also find examples of successful proposals from many federal funders directly, from funded Principle Investigators, or through Freedom of Information

Act requests. ARCC also has resources available to help you as will be discussed in the next section. You can find a list of resources collected for this document [here](#).

Communication: Effective communication takes time and effort. You need to build tools and time into your plan to communicate with different team members for different reasons throughout the proposal and project phases. For example, you will want to check-in with the Business Office and Sponsored Projects Office (SPO) to assure compliance with regulations, and you will want to connect with other team members to ensure they are on-track and progressing as well as to collect data and deliverables for reporting requirements. You may also need to convene larger groups to determine how to address challenges or changes that may need to be reported to the funder. It is important to build in the communication plan at the beginning to ensure expectations are clear. I **strongly** recommend at least one face-to-face meeting at the start of the project and regular check-ins via phone or videoconference for the duration of the project.

Required ARCC Procedures

Applications to federal granting agencies require a number of regulatory and documentation procedures to ensure that the money spent is done so according to college, state, and federal regulations. To do this properly, you will need help and support from ARCC staff and administrators and thus, you are using college resources. Such expenditure of resources dictates that there are a number of procedures you must follow to ensure that your grant proposal is in-line with the college's goals and that the college is willing to support of your work. An overview of these processes is available on the Intranet <link>.

The main advice, therefore, is talk with your dean and the Sponsored Projects Office (SPO) staff early in the grant process to avoid wasting significant time and mental energy on a project that will not be supported by the college. The SPO will be looking to see that "your project's goals align with the College's mission and strategic goals," so spend some time before meeting to answer a few questions listed below. Addressing many of these questions will also help you organize your thoughts to justify your grant to the funding agency. For more information contact the SPO at 763-433-1153 or by e-mailing grants@anokaramsey.edu.

Possible questions include:

1. What is the need, problem, or new idea you hope to address with this grant?
2. What literature or other data do you have that demonstrate a need or justification for your project?
3. How does your proposed work relate to **specific** goals or missions of the College?
4. What is the scale of this work and how long will it take to complete?

Once the SPO and your dean agree that there is good cause to proceed on your proposal, they should be able to assist you in further developing your ideas and creating required documents. At this stage, assistance could include finding suitable grant programs/funders, obtaining and reviewing relevant literature, identification of grant team personnel, and review of funding agency requirements. This work will prepare you for the next administrative step required by ARCC, completing the "**Request to Apply**," and should put you in a good place to continue developing your proposal for submission.

In the “**Request to Apply**” process, the SPO will assess the likelihood of success, the fit with ARCC, and the existence of sufficient support for your project. They will look at the aspects listed in [Figure 1](#). A favorable review of your project in this process opens the way for you begin writing and developing the proposal in earnest. It signifies that the college backs your submission and your effort will not be wasted by the SPO refusing to submit your finished proposal. At this point you may be eligible to receive a stipend or some release time to write your proposal, though it is somewhat unlikely. The SPO can now help your efforts by providing research, editing, writing and team management assistance in pursuit of a competitive submission. Note, however, that you are the discipline expert and will have the main responsibilities for the academic content and literature in your proposal.

- Evidence-based practice
- Background (capacity) of the college in project area
- Principal Investigator/Project Director readiness
- Sustainability potential
- Quality of project team, including partners
- Readiness to respond to request for proposal (have data & information)
- Competitiveness of solicitation
- Capability to respond (have time and resources)
- College's history with funder
- College resource investment required

Figure 1: Evaluation criteria for “Request to Apply” assessment by the SPO. Taken from [here](#).

The Grant Solicitation

Funding agencies hope to provide funds to worthy recipients, and often have to consider ramifications of poor funding decisions. The agencies, therefore, need a way to ensure they are funding qualified individuals and projects that meet with their mandates and values. A tool to accomplish these goals is the grant solicitation. The agency will tell you what type of projects or area of study they want to support and will put stringent standards on allowable expenses and activities to protect themselves from litigation or harm. There are also often strict requirements about how to format your proposal. My advice for finding a good match is to look at agencies and organizations that are important in your field or in your area of study. For me as a Chemist, the National Science Foundation and the American Chemical Society would be my first stops. Work with the SPO to find online grant solicitations and try to match the goals of your idea to the goals and interests of an organization or grant program.

Once you and the SPO have identified the grant program you intend to submit to, the first step is to read the grant solicitation **very** carefully. Remember, the grant solicitation is the way funding agencies tell you what they are looking for in a proposal as well as what you will be required to do/accomplish should you be awarded a grant. The requirements and procedures noted in the solicitation can be very specific and failure to follow them exactly may disqualify your submission. Due to limited time and personnel, funding agencies try to cull as many proposals prior to exhaustive review as possible. It is in your best interest to match the requirements as closely possible to maximize your chance for success and minimize the extra work needed to modify your submission.

As an example, in the 16-page solicitation for the National Science Foundation grant I received included one sentence that I missed that could have disqualified my proposal. The sentence was “The budget must include funds to support travel to the annual ATE PI Conference.” I was lucky that in addition to me and my team missing the lack of funds for travel, the Program Director and federal Division of Grants and Agreements also missed the lack of funds and we were awarded the grant. The downside was that we were required to immediately write a supplemental funding request on a short timeline and it led to a more complicated budget management process for the entire 4 year project. It would have been clearly better had we included travel in the initial request.

Writing a Grant Year-by-year Plan

If you have successfully completed the **Request to Apply** process, you should have a pretty good idea about what your project will look like, and have a general idea of what you will need to be successful. This means you have reached the point where the abstract needs to become specific. The goal of this section is to help you create breakdowns and tools that will help you write your grant and also help you administer the grant should you be awarded the funds.

Based on my experience, it was incredibly helpful to start with a broad outline of the major activities to be completed in each calendar year of the grant and then create more detailed plans from the larger framework. [Figure 2](#) shows the broad framework included in my team’s successful NSF-ATE grant proposal. It shows the major activities to be accomplished by segments of the academic year as well as a rough idea of the time required (e.g. one semester).

The broad overview was a great starting point for the narrative of my proposal, but it was not very detailed. In fact, the grant reviewers wanted clarification of what activities and deliverables were going to be completed each year as well as the responsible personnel for each. This clarification request resulted in me and my team preparing an additional 20 page response letter over the course of calendar days at the start of the spring semester. The more-detailed management plan we developed for our response letter became a very valuable tool in managing work on the grant and preparing scope of work documents required for ARCC and our sub-awardee institution. Our document detailed the major responsibilities, timeline for completion of tasks, major roles and deliverables for each of the main grant personnel. This provided an excellent roadmap for the funding reviewers and allowed grant personnel to assess their project responsibilities and progress. The management plan for my contribution to the grant is provided in as an example in additional resources as [Figure 5](#).

The management plan came from imagining step-by-step how each item would be completed and who would need to be involved. It cannot be overstated how much this helped the success of our proposal and our funded project. A short list of challenges we faced includes faulty equipment, legislative changes in cross-state insurance, weather cancellations, staff departures, online bot attacks, and software incompatibilities. If we hadn’t planned in detail and built in some flexibility in budget and timing we could have been in serious trouble with some of these issues. This in-depth though can also help in the event your funding agency will only fund your project for a portion of the requested budget. This document should also create a plan for the placement of team members and processes to ensure transparent oversight and monitoring of the grant progress.

Personnel and Intellectual Property

Ideally you have assembled a team of Co-Principle Investigators and collaborators based on the advice given in the preparation section of this guide. Each person should be matched to correct roles

Table 1. Proposed project timeline

	Year 1			Year 2			Year 3	
	Summer 2014	Fall 2014	Spring 2015	Summer 2015	Fall 2015	Spring 2016	Summer 2015	Fall 2015
Faculty Development								
Curriculum Development								
Curriculum Pilot Test								
Curriculum Revisions & Website Design								
Curriculum Field Test								
Evaluation								
• Formative Feedback on Faculty & Curriculum Development								
• Evaluate Curriculum Pilot Test								
• Evaluate Revisions & Field Test								
• Summative Evaluation								
Reporting & Dissemination								

Figure 2: Sample year-by-year plan.

through clear communications and documented qualifications, where applicable. All personnel should understand their major responsibilities and what documentation and deliverables they are responsible for. They should also be aware of the frequency of reporting required so they can accurately estimate the amount of time they need to contribute to the project. I recommend scheduling at least one meeting with the major collaborators early in the process to be sure you are all in agreement about the nature and expectations of the grant writing and submission process.

If your grant generates materials or data that may have monetary or intellectual value, you will need to identify the owner(s) of this intellectual property. Work with the SPO and any sub-awardees to identify if there are any directives dictating ownership and use this to write a statement of the intellectual property rights to guide how it is addressed in your proposal and in any contracts generated after being awarded the grant. In the grant my team was awarded we had two categories of produced documents and also video content. We identified ownership by who contributed significantly to the production of each item and used that to guide the sub-award contract we had the University of Wisconsin-Stout sign as a condition of serving as our sub-awardee. A good check for this is to be sure that all deliverables expected from the grant work are accounted for in your intellectual property statement.

Timeline

Table 1: Sample timeline for a grant proposal.

Time until submission	Action	Main personnel
> 1 year	Identify idea and collect references	Faculty PI or core team
	Start conversations with SPO and your dean	Faculty PI, SPO, Dean
	Prepare answer to questions in Required ARCC Procedures	Faculty PI or core team
	Identify potential funding sources	Faculty PI and/or SPO
	Sketch out simplified budget and justification	Faculty PI, SPO, Business Office
1 year	Complete the Request to Apply Process	Faculty PI or core team, SPO
	Finalize funding source	Faculty PI and/or SPO
	Read solicitation in depth and take detailed notes about the requirements for each section and related forms. Create an outline of the proposal from these notes. Include tasks, timelines, and team assignments.	PI, Core team, and SPO
	Identify external evaluator(s) and work out a rough plan and/or logic model for your proposal	PI and potential evaluator(s)
	Identify any external collaborating personnel and institutions. Identify oversight and contracting requirements as well as institutional review timelines	PI, SPO and any external personnel
	Begin writing proposal draft	PI (possible help from SPO)
9 months	Solicit feedback on draft	Core Team, SPO
	Check in with evaluator(s) on evaluation plan	PI and evaluator(s)
	Begin filling in details on submission budget	PI, SPO, and Business Office
	Start drafting budget justification based on your proposed work. Figure 6 shows a sample budget justification.	PI, SPO, and Business Office

	Have key grant personnel prepare their biographical sketch for the submission. Figure 7 has a sample sketch.	Core team, any external personnel
	Submit methods to the Institutional Research Board for evaluation and approval.	PI, SPO and IRB
3 months	Solicit letters of support from ARCC and specific relevant parties. (Offer to provide a draft for personnel to modify)	PI
6 weeks	Finalize your initial evaluation plan and have external institutions complete the final review	PI, partner institutions and Evaluator(s),
2-3 weeks	Identify final submission team personnel.	PI and SPO
	Run a “mock submission” to be sure all is in order	PI and SPO
5 business days	The completed proposal must be submitted to the SPO for final preparation for submitting. Sooner if possible	PI and SPO
2-3 business days	It is ok to submit early - do so if you can! Work with SPO to ensure proper submission	PI and SPO
Submission date	Final chance to work with SPO to ensure proper submission	PI and SPO

Budget/Budget Justification

Writing a budget and justifying the funds requested will be a significant preparation and will require consultations with many offices and personnel. You will also need ensure that all the requested funds are allowable by the agency, the state of Minnesota and the college. To be successful you will need to start working on the budget early in your writing process to ensure you and your team have enough time to complete your work.

You will also need to keep track of lots of different details at once. Your budget is one of the more complicated pieces due to the oversight requirements and layers of rules that must be followed. As you consider your project it might be helpful to start a separate document that details specific activities, expenditures to support that activity, and justification notes. This can help you organize what to include in your budget and get you started on your rationale for your budget justification. It also can streamline the process of confirming the expenditures are allowable by the federal, state, and college’s rules by checking with the business office and the funding agency policies. An example of the relevant guidance for the NSF is available in [reference 2](#).² I have included a basic sample entry in [Table 2](#) for your consideration.

Table 2: Sample budget activity and justification table.

Activity	Supporting Expenditures	Justification	Regulatory notes
UW-Stout MALDI Field trip semester 1	Bus or van rental	Transportation of ARCC Students to Menomonee, WI needed to attend event.	Provider must be licensed and approved by MN State. Current transportation allowable rates are ###/day

	Instrument usage fee	Covers maintenance, overhead and consumables for hands-on MALDI use.	
	Participant lunch	Participants are part of a 6 to 8 hour field trip, so one meal break is needed.	Funds must come from a separate "Participant costs" account.

Developing a Budget

Release time for grant personnel

One lesson I learned is that as the PI/PD for your grant you will spend significant time on administrative tasks even when the project is up and running. As such, you should estimate a baseline percent of your time for each semester/summer and move to a higher percentage for more active development or analysis portions of your grant period. The NSF and NIH use the unit "person months" to account for time spent on your grant activities. An FAQ about what a person month means and how to calculate it is available at https://grants.nih.gov/grants/policy/person_months_faqs.htm and one version of an Excel person month calculator is available from the FAQ or available directly from [this link](#). Work with the SPO and your dean to determine a reasonable baseline and determine where to increase your person months based on your proposed grant activities for each semester/summer. Working through this concurrently with work on your budget justification document can be of great help here.

For other academic members of your team, base the timing and amount of person months dedicated to a project on their proposed roles and activities. Don't forget to include preparation and training time in your assessments, however, as you and your team will suffer stress and fatigue from over-commitment if you do not. Once you have considered the time required for each role, work with the business office to determine how to translate person months into release time and identify what additional funds (like insurance and retirement, considered **indirect costs**) need to be part of your proposed budget. Again, your thought about this can help determine your budget justification document and vice-versa.

For academic personnel the SPO and Business Office will likely recommend a small percentage increase to salary requests for each subsequent year. This is due to the fact that the grant funds are set at the time of submission and will not be subject to negotiation should your base salary change over the grant period and also reflects the more sophisticated knowledge you have gained in relation to your grant project. Presumably your contributions are more efficient and valuable as you move through the process.

Student workers and/or post-doctoral fellows are considered a separate category in your federal budget documents. If you plan on using students or visiting scholars in your work, careful consideration about training, safety monitoring, contribution to grant activities, and duration of the position can help you decide the funds needed to support this work. Individual contracts for specific work, employment contracts, or work-study employment contracts are all possible ways to involve this category of participants. Work with the business office, work-study office, and the SPO to decide how best to work with students and post-docs as there are slightly different rules for each of these possibilities.

Staff time and effort on grants is typically considered under the heading of indirect costs because the business office and SPO are not only there to work on your grant. Indirect costs are calculated as a percentage of the specific parts of your grant dollars for your project at either the base

percentage or a federally-negotiated percentage (26.20% at the time of writing). Note that your grant is locked at the percentage at the time of your grant submission, so generally no additional funds are available to cover a change during your grant period. This is part of the justification for requiring the ARCC review process and the **Request to Apply** procedure. The college needs to be willing to support the required administrative tasks for the amount of funding dictated by the current indirect cost percentage.

External evaluation is an important component of your proposal, and thus, is an important component of your budget. The NSF expects up to 15-20% of your overall budget to be dedicated to external evaluation. I will detail more about external evaluation in the [Grant Evaluation](#) section below, but this means you need to ensure you have a rigorous and qualified evaluator or evaluators for your project. A good place to start can be found in the [Federal Resources](#) section.

Grant Funds by type

Your grant applications documents will require you to collect costs into specific categories of your budget to allow for better management and monitoring. [Figure 3](#) shows the major categories of an NSF-ATE proposal. Many of the major categories also have specific subcategories that you will divide your budget request into. Based on your potential funding agency you may have different categories or budget instructions. For example, the NSF has the PAPPG³ and NIH has a grant preparation website⁴. Check with the SPO to get the proper procedures for your grant opportunity.

A. SENIOR PERSONNEL: PI/PD, Co-PI'S, Faculty and Other Senior Associates
B. OTHER PERSONNEL
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000)
E. TRAVEL
F. PARTICIPANT SUPPORT COSTS
G. OTHER DIRECT COSTS
I. INDIRECT COSTS (SPECIFY RATE AND BASE)

Figure 3: Example categories from an NSF ATE proposal.

Some funding opportunities will require specific separation of some types of funds. For example, the NSF requires that “participant support costs” (PSC) be tracked specifically and separately from other grant dollars. A participant support costs definition is available in the glossary, but generally it is for travel, fees, or payments made to or on behalf of people who are benefiting from your project, but not specifically a part of the project. (E.g. the students who were learning MALDI TOF mass spectrometry in my grant were not employees, so travel and other costs for them were paid out of PSC and not general grant funds.) Work with the SPO and business office to identify what specific requirements the college and funding agency have for your grant.

Travel Funds

Travel in support of your grant or as a portion of your professional development in completing your project can be an excellent opportunity to learn new things, move your field forward, and to network with other professions for possible future collaborations. The funding agency will likely want you to present about your project to maximize their investment, but they will also want separate accounting and tracking of travel spending and possible will require separate accounting for domestic and foreign travel.

You will want to work with the SPO and Business Office to determine estimated costs for any travel required or expected in your project. This should include things like airfare, hotel, and per diem funds for meals out of the normal work area. Note that the reimbursement rates periodically change and they can also vary depending on the location of travel. In our grant we sent team members to Washington DC (higher per diem), San Francisco (higher per diem), New York (higher per diem), and Greely Colorado (regular per diem). Be sure to include all allowable expenses as it is unlikely you will be reimbursed for more than your initial request but it is fine to request less reimbursement than you filed before you left.

Grant Evaluation

Both internal and external evaluation are important components of nearly any academic grant but there is a danger of framing this requirement as an administrative hurdle in the “real” grant progress. I have learned, instead, to consider this as an opportunity to monitor and improve your process/grant. You will get the most out of this often-required facet of your federal grant program and you will have a stronger program if you are open to the evaluation feedback. Below I will address the justifications for evaluation, some things I did correctly, some I did not do correctly, and additional information I have learned as part of the professional development I gained through the ATE grant program.

Justification for Evaluation

Evaluation is a general name for tools and processes that are used to assess the effect/success of your project. It requires four general steps: (1) Asking important questions, (2) gathering evidence, (3) interpreting results, and (4) reporting and using results.⁵ Your evaluator can help you with step 1 as they develop a plan and possibly a logic model (see [Figure 4](#)) to guide the goals and progress assessment of your project.⁶ In step 2, gathering data will depend on the type of plan you have developed. It is likely that you, the Office of Institutional Effectiveness, and the external evaluator will all have different components of this step. Your evaluator will be largely responsible for step 3 as he/she is the expert in evaluation. Your biggest responsibility, then, comes in at step 4. You need to use the results of the evaluation to assess how your project is doing and how you can improve it. You are also responsible for reporting your evaluation and you can use your data as support for decisions to change the scope or direction of your project as it progresses. It is also important to have this data if you plan to submit another proposal in the future. You will be required to provide evidence of the results of previous funding.

Specifics of Evaluation in a Project/Proposal

As you prepare a proposal, you are in a somewhat interesting position regarding grant evaluation. You should absolutely work with an evaluator to develop an effective logic model⁷ and evaluation plan for your project. Doing so will focus your idea to an achievable plan. You don't, however, have any funds to pay for their time. In some colleges it is even worse as once you get a successfully funded proposal, external evaluation contracts must be put out to bid so the original evaluator is not even guaranteed to work with you. Most good evaluators, however, will work with you without charge for the submission/bidding part of a proposal and luckily, at ARCC none of these challenges were an issue. If state or college procedures have changed by the time you are ready to write a proposal some options to consider include bidding a contract to work on the proposal before the submission or including your chosen evaluator as a sub-awardee.

I did work with my external evaluators prior to submission to ensure they could contribute to the project, but I would definitely recommend contacting evaluators sooner and more often than I did. We would have likely reached our final level of success with our project sooner if I had worked more closely with our evaluators prior to submitting our proposal. If you do not have an external evaluator in mind, the EvaluATE program center has a resource for identifying potential evaluators in [reference 8](#). Although this is written for the ATE program, the resources contained in the reference are generally applicable. At least for the NSF, the project team selects their own evaluator following relevant college and state policies though they might raise concerns if the reviewers question the evaluator's qualifications.

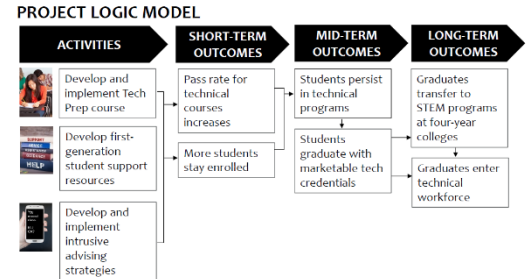


Figure 4: Sample project logic plan from the EvaluATE program center.⁶

In my grant I was lucky that a member of my team connected our project with a former colleague, Dr. Douglass Huffman, who turned out to be an excellent resource for our project and we already knew a specialist in our content area for scientific evaluation, Dr. Joseph Dalluge. He was able to help shape the proposed evaluation plan, but also to help us adjust the plan once we actually received the funds. Note that had I worked more closely with him prior to our submission we would have had less adjustments after receiving funds. Elaine Craft of Mentor Connect noted that often our project ideas should be considered a vision and that you work with your evaluator to pick a subset of items from your vision that are measurable and achievable within the constraints of the time and budget of your proposal.⁵

Once you have received funds for your project, your evaluator will develop the actual instruments and processes to collect that data your plan requires. Lori Wingate of EvaluATE stressed that face-to-face meetings are an important process of this development and the monitoring of your project.⁵ You should, therefore, ensure your budget contains funds for travel by your evaluator and possibly select an evaluator who is relatively close to your project location. This is something I did not include and one of my evaluators was based in Kansas. I was again lucky that his ties to Minnesota allowed us to meet on one occasion at the start of our project where he covered the travel out of his compensation for the grant work without it specifically being tied to travel. Our in-person meeting was an excellent experience that led to very quick progress in our development of the project.

Submitting your Grant

The SPO should help in any submission process, but for some funding agencies, like the NSF, it is absolutely required. Many funding agencies have very specific requirements for how grants should be prepared and submitted and will quickly discard proposals that fail to adhere to the requirements. The SPO should be available to help ensure your proposal follows the guidelines as well as auditing the formats and preparation of required coversheets and institutional documentation.

You will see on [Table 1](#) that you should be working with the SPO through much of the preparation process, but it is important that you determine who will work with you on the day of submission and plan a mock submission 2 to 3 weeks before your intended submission date. This will allow you to ensure all the documents are available and complete. You may run into challenges (like outdated federal software) along the way so it pays to be prepared. In our case, a government shutdown took place 5 days before our mock submission and ended on the due date for submissions. The guidance from the NSF that morning was that no extension would be granted, and thus, we spent 8 hours dealing with submission before the 5 PM Washington DC time deadline.

Administration of Federal Grants

Once the grant proposal has been accepted, the SPO has will negotiate the final grant award terms with your assistance. With the completion of the negotiations, you will need to begin implementing your management plan to set in place the team and processes that will allow you to monitor your grant with appropriate oversight and transparency. (See [Year-by-year Plan](#))

Personnel and Responsibilities

Principle Investigator/Project Director

As the PI for a federal grant, your main responsibility is to ensure the successful completion of the proposed work for which you were funded. That said, however, you will also have responsibilities like preparing reports (or having them prepared), monitoring the grant budget tracks with timelines and project goals, ensuring all institutions and team members are communicating, and approving

expenditures. You should also look for opportunities to document grant activities, changes/challenges, and outcomes to report to your funding agencies and other interested parties. Remember that changes to the scope of a project (both expanding and curtailing) can often be implemented with the approval of the funding agency. Due to these responsibilities, it is often reasonable to expect about 5% of the total budget to be spent on the administrative oversight by the PI(s).

As the PI/PD you should be given access to the grant budget management system through the ARCC intranet system. You will want to work closely with the Business Office to identify the types of expenditures by budget code and how to use the budget tracking systems. [Figure 13](#) show an abbreviated list of general ranges of important budget object codes and the definition of the BoC is in the [Glossary](#). The complete list of object codes is 14 pages long.

Sponsored Projects Office

As noted above, the SPO will negotiate final terms of the award with the assistance of the PI/PD. This is not as trivial as it may seem as funding agencies may not approve the full budget and the grant team may need to identify if or how they can change the project to meet the new budget. As frustrating as it can be, your team may have to refuse the offered grant if the funding offer is not workable for the scope or project. Once the terms are negotiated, the SPO will provide a copy of the Grant Award Notification (**GAN**) to you and the business office. They will also work with you to identify the resources available to you and the systems/rules you need to follow to adhere to the conditions set up by the GAN. You will likely work with the SPO and the Business Office together to identify the final procedures needed for proper financial oversight.

Business Office

The Business office will establish the cost center for the project and help determine the financial tracking and reporting processes. Ideally, you will work with the director, currently Kim Bienfang, and at least one other person to manage the federal oversight and financial reporting requirements. They should also:

- Work with you to set out your responsibilities for tracking and reporting on the use of grant funds.
- Help you fill out a budget packet and load your budget into the financial system.
- Give you budget management access through the ARCC intranet.
- Set up access to print using grant funds for allowable needs.

Required Documentation

Your funding agency and the college will have requirements that you and your teams document the progress you make on your grant and the effort that you put into the grant. This can be done like a timesheet or based on activities or production of deliverables according to how your grant was written. The sections below will discuss some of the possible ways to structure your documentation and record the work with the college.

Reasonable Credit Equivalencies: This is an agreement signed by the faculty member and their dean to account for part of the faculty teaching load as an alternative assignment. In this case, grant work. If you are a science faculty member, be sure your RCE states both the credit and contact hour equivalency

before you sign in. (1 credit is equivalent to 1.3333 contact hours as the formula is $(cr) \times (40 \text{ CH} / 30 \text{ cr}) = \text{CH}$.) A sample document is shown in [Figure 8](#).

Contracts: One way to bring external expertise, like an external reviewer, into your grant is to contract with them for specific services and/or deliverables. This is where having a management plan like shown in Figure 5 for each person can streamline preparation of the contracts required. You will need to work with the Business Office to execute any contracts as they will require college and Minnesota State approval. Any materials or services from external sources over \$500 will require a contract, but you can also use them for smaller dollar values. I ended up contracting with some student workers for \$35 each for specific deliverables. See [Managing your Budget](#) for details about setting up and paying out contracts.

Internal Requisitions: Any funds to be spent on external materials or services for the grant will require that an internal requisition form be completed prior to payment. The business office can help you with identifying where the current forms are and what requires an internal requisition. An example is available in [Figure 10](#).

Travel Documentation: In terms of ARCC, you will also have to fill out separate special paperwork for any travel on your grant. (Remember to include this type of administration requirements in your estimates for release time!) In Figure 11 you see a sample Out of State travel form that must be filed before your travel several weeks before you travel and must be submitted to your dean for approval. You will also need to submit receipts and employee expense forms upon your return as seen in Figure 12. This must be completed **within 60 days** of the actual travel or reimbursement may be denied.

Managing your Budget

The major needs that you must address in managing your budget are (1) make sure expenditures are allowable/match your budget (2) keep a transparent record of documentation should you be audited, and (3) ensure you do not overspend the granted funds. You should develop a system with input from the SPO and the Business Office to meet these major needs and is as easy to complete as possible. For me this involved setting up an Excel spreadsheet with tabs for each year and cumulative totals so I could track spending along the way. A sample of the type of Excel I created is provided in [Figure 14](#). (You can explore both sheets by double-clicking on the embedded Excel Spreadsheet.) The budget values and names were made up for this example, but it is similar to what I used. If you click in the excel cells you can see the equations I used to calculate the numbers displayed.

You should plan time in your schedule to review the documents in Table 3: Budget tracking forms from the Business Office [Table 3](#) at least quarterly, but it may be helpful to do so monthly as it will provide you the opportunity to assess the grant progress and see if parts need to be reined in or if you can enhance or expand some aspect of the project. Talk with the SPO and Business Office to determine whether a face-to-face meeting or online collaboration makes sense to ensure all three groups are on the same page. I would recommend at least one face-to-face meeting annually to close out the budget year and ensure the subsequent year budget is correct and loaded into the system.

Table 3: Budget tracking forms from the Business Office

Form	Description
AC0511CB	Budget to Actual: tracks actual spending in budget categories
AC0519CB	Open Purchase orders: lists purchase orders by cost center

HR2240	Salaries: tracks funds paid to and on behalf of employees.
--------	--

When you contract with a person or company as part of your grant you will need to put in a purchase order and internal requisition as part of setting your budget. At the completion of the requirements of the contract you will need to provide a vendor invoice document to the business office so they can execute the payment. See [Figure 9](#) for a sample vendor invoice form.

As your project's Grant Period nears, you may be eligible request a No-Cost Extension.⁹ This is an extension of the Grant Period to give you time to complete project goals without any increase to your budget. Generally, you must have some funds remaining in your budget and you must propose what items/activities you plan to work on in the expanded Grant Period. Spending down funds alone is not an acceptable reason to request a No-Cost Extension. Should you request a no-cost extension from your funding agency, a new budget packet will be required as well.

Reporting Responsibilities

The GAN that is provided at the time of funding will include the required reporting for your grant and will be based on the solicitation for proposals. Reports generated for your project will obviously require time for writing and editing, but you will also need to budget time for collecting supporting evidence and data to report to your funding agency. One recommendation I would make is to collect data about your results and evaluation along the way so it is a smaller task to organize and find additional data at the time the reports are close to due. This may be part of the agreed upon scope of work/deliverables from Figure 5: Example of Management Plan for Christopher Lutz [Figure 5](#).

Generally the PI/PD is responsible for either completing the reporting or delegating the preparation to appropriate grant personnel. Failure to submit reports on time will affect the eligibility for federal grants for the PI/PD, but also for the college and its employees, so it is important to plan ahead to avoid delays.

Acknowledgements

First and foremost, I must acknowledge the contributions of my grant team to the success of the proposal and support of the project in general. They include Dr. Jenifer Grant, Dr. Patty Pieper, Mr. Andy Aspaas, Elisabeth Palmer, Heidi Vidor, and Kim Bienfang. Through all the drafting, editing, justification, and management the members of my team provided vital support and inspiration. I also need to single out Elisabeth Palmer for conversations helping to improve this document.

I also received important support and encouragement from two of my deans, Dr. Kim Lynch and Dr. Mellissa Mills. I also thank Nora Morris for her help on the processes.

Finally, I am grateful for the support and encouragement from my wife, Jill Lutz, and my family in helping keep things together through ups, downs, and required travel.

Common Abbreviations

ATE: The Advanced technological Education grant program. This program is targeted to community and technical colleges and other technician training programs and centers.

DGA: The Department of Grants and Agreements, a section of the Office of Budget, Finance and Awards Management in the National Science Foundation.

GAN: Grant Award Notification. The document that your funding agency provides the college setting up the award conditions, amounts, and timeframe for the work.

IRB: Institutional research Board. The body at the college (or aligned with the college) charged with reviewing proposed research for compliance with human and/or animal subject regulations. Most academic projects will fall under the “Exempt” category and will not require further monitoring by the IRB after the initial review. The levels are discussed in [reference 10](#).

NIH: The National Institute of Health (<https://www.nih.gov/>)

NSF: The National Science Foundation (<https://www.nsf.gov/>)

PSC: Participant support costs. (See glossary for definition.)

RCE: Reasonable Credit Equivalence

SPO: Sponsored Projects Office

Glossary

Budget Object Code *n, pl-s*: Accounting codes to track financial transactions according to the service provided or received at the time the transaction occurred.

Deliverable *n, pl-s*: Something produced as a result of your grant process. May be physical, digital, or intellectual expertise items.

Direct Cost *n, pl-s*: Expenditures that tie directly into the project/grant activities and not to other supporting activities/departments. They must also be allowable by the SPO guidelines.¹¹

Effective Date *n, pl-s*: The date from the grant notice after which charges on the grant funds are allowed.¹²

Expiration Date *n, pl-s*: The date from the grant notice after which charges on the grant funds are no longer allowed.¹²

Fringe Benefit *n, pl-s*: Payments to medical and dental insurance or retirement accounts for employees that are not direct salary. These may be charged to the grant as a direct cost for academic/technical personnel but are part of the negotiated indirect or F&A percentage for administrative and clerical personnel.^{13,11} (*See Indirect costs for clarification.*)

Grant Period *n, pl-s*: The time where the granting agency allows costs to be charged to the grant. It runs from the **Effective Date** to the **Expiration Date** on the grant notice.¹² Charges outside this period are not allowed even if spent in support of the grant. For NSF grants if you have funds remaining as the Expiration Date approaches you can apply for one or more **No-Cost Extensions** to continue spending down funds and continuing or finishing up your grant activities.

Indirect Cost *n, pl-s*: “Indirect costs, according to the federal Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards issued by the Office of Management and Budget (Uniform Guidance), are those costs that are incurred for common or joint objectives, and cannot be easily and specifically identified with a particular sponsored project, an instructional activity, or any institutional activity. These costs are also sometimes called “facilities and administrative costs (F&A)” or

“overhead.” The terms indirect costs, overhead costs, and F&A costs are synonymous. These indirect costs are different than direct costs.”¹¹

No-Cost Extension *n, pl-s*: An extension of the Grant Period for a grant that still has funds available. There are different types of extensions available, but they must be reviewed and approved by the funding agency.⁹

Participant Support Cost *n, pl-s*: “direct costs for items such as stipends or subsistence allowances, travel allowances and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with meetings, conferences, symposia or training projects.”¹⁴

Additional Resources

Web Resources

<https://www.grants.gov/web/grants/learn-grants.html>: Site detailing basics of federal grants and processes. You can also search available grants, though the large number of types of grants may make it easier to target a specific agency first.

<https://www.research.gov>: Online management site for NSF grants

<https://www.fastlane.nsf.gov/>: Older online management site for NSF grants. Some features are still only on fastlane, but will likely be moved to research.gov in the future.

<https://vpresearch.louisiana.edu/pre-award/building-your-budget/direct-costs-vs-indirect-costs>
discussion of direct vs indirect costs

Anoka-Ramsey Resources

1. Business office intranet site:

https://myanokaramseyedu.sharepoint.com/myanokatechedu_myanokaramseyedu/businessoffice/SitePages/Home.aspx

2. Sample Management Plan:

Management Plan	
<p>Christopher Lutz, Ph.D., Principal Investigator</p> <p>Dr. Lutz has over 9 years of teaching experience in general, organic, polymer, green, and materials chemistry courses. He has extensive experience with technology and teaching in online and hybrid formats. Dr. Lutz currently chairs the Technology Advisory Committee for ARCC and serves as the Key Communicator (similar to division chair) for the Physical Sciences and Engineering division.</p>	
Roles and Responsibilities (Timelines)	Deliverables
<p><u>Project Management (ongoing)</u></p> <ul style="list-style-type: none"> • Manage project to ensure it stays on schedule • Facilitate communication between ARCC, UW-Stout, and external reviewer and evaluator • Lead project meetings between ARCC, Stout, and external reviewer and evaluator 	<p><u>Project Management</u></p> <p>1. NSF progress reports</p> <p><u>Curriculum Development</u></p> <p>2. Script for video detailing background of MALDI with associated online quiz</p>

<ul style="list-style-type: none"> • Provide External Evaluator with materials to make formative and summative assessments • Collaborate with External Evaluator and ARCC Office of Institutional Effectiveness on IRB submissions as protocols are developed. • Write and submit NSF updates and other documentation required by NSF • Discuss data quality with Ever Cat Fuels personnel to ensure programmatic goals are being achieved and student data are sufficiently high quality by industry standards • Supervise web design and video design student assistants <p><u>Curriculum Development & Revision (fall 2014, summer/fall 2015)</u></p> <ul style="list-style-type: none"> • Collaborate to prepare video scripts, quizzes, presentation materials with the Co-PI and collaborators • Lead development of a feedback form for Ever Cat Fuels personnel to evaluate student presentations • Develop three assignments for students to assess 1. Intellectual merit 2. Experimental plan and 3. Critical evaluation of their data. <p><u>Curriculum Implementation (spring 2015 and 2016)</u></p> <ul style="list-style-type: none"> • Teach one section of Organic Chemistry II with RIMM module • Grade MALDI wiki submissions <p><u>Dissemination (summer 2015-spring 2016)</u></p> <ul style="list-style-type: none"> • Develop open-access web site for dissemination of data and RIMM materials and supervise student worker on web site project • Present at regional 2YC3 conference(s) • Curate a MALDI topics WIKI <p><u>Project Evaluation (ongoing)</u></p> <ul style="list-style-type: none"> • Keep a reflective journal through design, implementation and revision of the project • Participate in interviews with external evaluator 	<ol style="list-style-type: none"> 3. Script for video detailing sample preparation 4. Three assignment protocols for use in the RIMM's 5. MALDI post-quiz <p><u>Dissemination</u></p> <ol style="list-style-type: none"> 6. Open-Access website for dissemination of science and RIMM methodology, publications, and collaboration 7. Open access wiki about MALDI including relevant literature citations 8. Dissemination talk materials 9. Teaching of Chemistry manuscripts for publication <p><u>Project Evaluation</u></p> <ol style="list-style-type: none"> 10. One section of scientific and project evaluation data for evaluation 11. Reflective journal 12. Feedback form for industrial collaborators to assess student presentations and data
---	--

Figure 5: Example of Management Plan for Christopher Lutz

3. Sample Budget Justification:

V. Budget Justification, ARCC

A. Senior Personnel Costs at Anoka-Ramsey Community College

1. Dr. Lutz will serve as PI, providing leadership and accountability for the project. He will manage activities that occur at ARCC or directly involve its faculty. He will also supervise creation of the website, and its overall content. A total of \$[REDACTED] is requested for two weeks of summer support in years 1 and 2 and one week of support in year 3. These funds will also support the web site development and release time to help develop the curriculum.
2. \$[REDACTED] is requested for three days summer support for Dr. Pieper and Dr. Lutz in Year 1 (\$[REDACTED] each), to attend the faculty MALDI training and \$[REDACTED] is requested for Mr. Aspaas to attend the training.
3. A total of \$[REDACTED] is requested to support each ARCC faculty member for 1 credit per semester of release time in year 1 to develop the curriculum for implementation in year 2. (\$[REDACTED] for Doctors Pieper and Lutz, \$[REDACTED] for Mr. Aspaas.)
4. In Year 1, Mr. Aspaas will receive 4 days of summer support (\$[REDACTED]) for the production, editing, rendering and testing of two instructional videos describing techniques employed in the modules. He will also supervise a portion of the student worker time requested below.

B. Other Personnel at ARCC.

In Year 1,2, ARCC will hire a student to assist Dr. Lutz and Mr. Aspaas with website creation and to help make animations to improve the videos, for a total of 25 hours at a rate of \$8.50 per hour, or \$ 213 total.

C. Fringe Benefits. Total fringe benefits for these ARCC personnel costs equal \$9,810.

Non-Personnel Costs at ARCC

D. Equipment.

ARCC maintains the equipment needed for this proposal.

E. Travel

1. \$800 is requested for Dr. Lutz, Dr. Pieper and Mr. Aspaas to travel to UW-Stout for the MALDI faculty development workshop including meals and lodging..
2. In the summer of Year 2, the three ARCC faculty will attend the two day MALDI Training refresher course at Stout, so they can cement the knowledge gained in their first clinic and continue to instruct their students knowledgeably on this instrumental technique into the future. Travel costs are estimated at \$497 for travel and meals.
3. Meeting attendance provides for exceptional professional development opportunities. Dr. Lutz, and Mr. Aspaas will present at Two-Year College Chemistry Consortium conferences in different regions of the country in years 2 and 3 at an estimated cost of \$780 each. Dr. Pieper will present at the Biennial Conference on Chemical Education held at the University of Northern Colorado in year 2. Costs for travel registration and meals are estimated at \$1250 for this conference.

F. Participant costs:

\$980 is requested for the costs associated with a field trip so students can perform MALDI at the UW-Stout MALDI facility, in Years 2 and 3. Each trip requires \$490 for rental of a bus + driver.

G. Other Direct Costs.

1. Supplies

c. RIMM biofuel crop lipid projects Total = \$256, total. Requested for Years 2 and 3: photocopying, and a contribution of \$38 per year to the cost of providing for rental of a CO2 tank. This is 1/3 of the total annual cost.

2. Publication Fees- none

3. External Consultants

With more than 20 years of experience in science education and evaluation, **Dr. Douglas Huffman** will serve as the external evaluator for the project. \$3260 per year is requested for his consulting services, which include his travel costs. **Dr. Joseph Dalluge** is the Director of the University of Minnesota Mass Spectrometry Laboratory. He has over 16 years of professional experience in the field. \$3,000 per year for two years is requested, which will include any travel costs. Evaluator and consultant fees represent 15% of the total budget.

4. Computers Services- ARCC will create and maintain the RIMM Coalition Website at no Cost (see letter of support)

5. Subaward a subaward of \$25,599 will be made to UW-Stout

H. Total Direct Costs are calculated at \$85,522 for this project.

I. Indirect Costs are calculated at the ARCC rate of 26.2%, or \$22,150 for this project.

J. Total project request for this is \$107,672.

Figure 6: Sample budget justification document from NSF-ATE # 1400885

4. Sample Biographical Sketch

Christopher Michael Lutz

Department of Chemistry
Anoka-Ramsey Community College
Coon Rapids, MN 55433

Voice (763) 433-1494

Fax (763) 433-1521

Christopher.Lutz@anokaramsey.edu

PROFESSIONAL PREPARATION

<u>Institution</u>	<u>Area, Major</u>	<u>Degree, Year</u>
University of Minnesota-Twin Cities	Chemistry	B.S., 1997
University of Illinois-Urbana-Champaign	Chemistry	Ph.D., 2004
University of Michigan-Ann Arbor (post-doc)	Chemistry	2006

PROFESSIONAL APPOINTMENTS

Anoka-Ramsey Community College, Chemistry Department, Coon Rapids, MN

Chemistry Faculty (2009-present)

University of Wisconsin-Stout, Chemistry Department, Menomonie, WI

Lecturer in Chemistry (2005-2009)

University of Michigan-Ann Arbor, Chemistry Department, Ann Arbor, MI

Postdoctoral Fellow (2006)

PUBLICATIONS CLOSELY RELATED TO PROPOSAL

OTHER SIGNIFICANT PUBLICATIONS

Kang, Y.; **Lutz, C.M.**; Hong, S.A.; Sung, D.; Lee, J.S.; Shin, J.H.; Nam, H.; Cha, G.S.; Meyerhoff, M.E. Development of a Fluoride-Selective Electrode based on Scandium(III) Octaethylporphyrin in a Plasticized Polymeric Membrane *Bull. Korean Chem. Soc.* **2010**, *31*, 1601-1608.

Lutz, C.M.; Wilson, S.R.; Shapley, P.A. The First Imido Complex of Osmium(VI), [CpOs(NH)(CH₂SiMe₃)₂][SO₃CF₃] *Organometallics*. **2005**, *24*, 3350-3353.

Buss, C.E.; Anderson, C.E.; Pomije, M.K.; **Lutz, C.M.**; Britton, D.; Mann, K.R. Structural Investigations of Vapochromic Behavior – X-Ray Single Crystal and Powder Diffraction Studies of [Pt(CN-isoC₃H₇)(4)][M(CN)₄] for M = Pt or Pd. *J. Am. Chem. Soc.* **1998**, *120*, 7783-7790.

SYNERGISTIC ACTIVITIES

Collaborated on a multidiscipline SOTL study of active learning techniques and their impact on student learning outcomes.

Developed graphics, tools, and strategies to convey scientific information to students online in an effective manner.

COLLABORATIONS AND OTHER AFFILIATIONS

(i) Collaborators

Youngea Kang, Kwangwoon University, Seoul, South Korea

Mark Meyerhoff, University of Michigan, Ann Arbor, MI

Marcia Miller-Rodeberg, University of Wisconsin-Stout, Menomonie, WI

Dan Riordan, University of Wisconsin-Stout, Menomonie, WI (Retired)

Laura Schmidt, University of Wisconsin-Stout, Menomonie, WI

Ana VandeLinde, University of Wisconsin-Stout, Menomonie, WI

(ii) Graduate and Postdoctoral Advisors

Mark E. Meyerhoff, University of Michigan-Ann Arbor(Postdoctoral Advisor)

Patricia A. Shapley, University of Illinois-Urbana-Champaign (Ph. D. Advisor)

(iii) Undergraduate Students Supervised

Jon Breen, Marc Hannum, Tim Lurvey, Max Dingeman, Jordan Lee, Gabrielle Gottfried

UW-Stout undergraduates (2005-2008)

Figure 7: Sample biographical sketch.

5. Sample "Reasonable Credit Equivalent" form

Reasonable Credit Equivalence Mutual Agreement Form

In accordance with MSCF Master Agreement Article 11, Work Assignments, Anoka-Ramsey Community College and Chris Lutz have mutually agreed to a reasonable credit equivalence assignment in the amount of 1.25 credits for FY 17 with 0.75 credits assigned per semester.

This assignment is to:

- Assist program area with lab coverage
- D2L Course Implementations
- Skills test outs
- Key Communicator
- Center for Teaching & Learning
- Department Scheduler
- Program Review
- Program Changes
- Accredited program requirements
(NLNAC, ASHP, CAPTE, etc.)
- Assessment
- MSCF leadership
- MSCF Grievance representative
- Other duties as mutually determined and written below

Duties as mutually agreed upon:
 1.25 credits or 1.666 contact hours to serve as the PI on the NSF-ATE grant (FY) and correcting budget inaccuracies (F16) and managing project budget(FY). This also includes directing the project workflow(FY); serving as driver and additional faculty support for 1062 student MALDI fieldtrip and EverCat presentations (S17); serving as communication liaison between faculty and staff at ARCC, faculty at ARCC and faculty at UW-Stout, and the ARCC and the NSF program officer (FY); numerous federally-mandated reporting requirements(mostly S17) and much more. Representing ARCC at national American Chemical Society meetings (S17).

Figure 8: Reasonable Credit Equivalence Form showing justification and the credit/contact hour equivalency.

6. Sample Vendor Invoice

VENDOR INVOICE

I hereby certify that the services listed below have been rendered; that this is my only invoice for these services; and it is correct and just, and that no part of it has been paid.


SERVICE Creation of Evaluation and Evaluation Report


ON grant year 1 (2014-2015)

TOTAL FEE \$ 2960.00

DATE: 7/31/2015

SIGNATURE: 

TYPE OR PRINT NAME AND ADDRESS: 


(College Authorized Signature)
7/31/2015
(Date)

Purchase Order # 57451

Figure 9: Sample vendor invoice form for one grant year contract with my external evaluator.

7. Sample Internal requisition




	A	B	C	D	E	F	G	H	I	J
1	Anoka-Ramsey Community College									
2	Internal Requisition									
3	Proposed Vendor:	University of Minnesota MS				Cost Center:	327000			
4	Address:	207 Pleasant St. SE				Cost Center:				
5	City, State and Zip	Minneapolis, MN 55455				Contract Number:				
6	Phone #:					Purchase Order #:				
7	Federal Tax ID #:					Vendor #:				
8	Fax #:									
9	E-mail:									
10	Quantity	Catalog	Description	Unit cost	total cost					
11	4		MALDI MS use (per hour)	\$78.00	\$312.00					
12					\$0.00					
13					\$0.00					
14					\$0.00					
15					\$0.00					
16					\$0.00					
17					\$0.00					
18					\$0.00					
19					\$0.00					
20			Shipping, Freight or handling		\$0.00					
21					Total	\$312.00				
22										
23	Purchasing Guidelines: Purchases totaling \$2,500 - \$24,999 require two bids. Bids must be in writing for									
24	purchases from \$5,000 to \$24,999. For additional information regarding									
25	purchasing guidelines go to N:\ARCC Public\Forms\Purchasing Guidelines.									
26	For detailed information regarding completing a 16A, go to N:\forms\16A									
27	Was a targeted vendor contacted? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no									
28	If yes, will you be purchasing from the target? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no									
29	If no, who									
30	Vendors contact					Dollar Amount				
31						Dollar Amount				
32										
33	Person for Request:					Date:				
34	making request:					Date:				
35										
36	Approved by:					Date:				
37	Approved by:					Date:				
38										
39										
40	For detailed information regarding completing a 16A, go to N:\forms\16A									
41	For detailed information regarding Special Expense Forms, go to N:\forms\SE									
42										
43										

Figure 10: Sample Internal requisition form.

8. Sample Out of State Special expense form

Anoka-Ramsey Community College
Out of State Travel/Special Expense Approval/Authorization

Name of employee(s) & or student(s) taking trip or incurring special expenses (attach list of attendees/invitees): Patty Pieper			
Purpose of travel or event (attach copy of agenda if applicable): Required NSF ATE PI-Conference hosted with AACC			
Destination/location: Omni Shoreham Hotel, Washington DC		Dates of travel: 10/21/15-10/23/15	
Cost Center: 327000	Mode of Travel: ("X" all that apply)	X Private Air Automobile	X Other
Special Expenses			
Approval is requested for the following ("X" all that apply):			
<input type="checkbox"/> Meal which exceed maximum allowed per bargaining agreement			
<input type="checkbox"/> Meals within work area			
<input type="checkbox"/> Meal and/or refreshments (coffee, tea, or soft drinks) for group at meeting or conference			
<input type="checkbox"/> Conference and registration fee in excess of \$500			
<input type="checkbox"/> Lodging within work area			
<input type="checkbox"/> Other special expense (specify description, quantity, unit cost, total)			
ITEMIZATION OF COSTS			
<u>Description</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total</u>
TOTAL ESTIMATED COST			= \$ _____
Out of State Travel			
AIRFARE:	\$ 235.20	x 1	= \$ 235.00
	Round trip per person	Number of people	
LODGING:	\$ Covered	x	= \$
	Per night per person	# of nights	# of people
MEALS:	\$ 44/day	x 3	x 1 = \$ 132
	Per day per person	# of days	# of people
REGISTRATION FEE:	\$ 50	x 1	= \$ 50
	Per person	Number of people	
OTHER (specify)	\$ Ground transportation: mileage to/from ARMSP; shuttle RT from/to DCA Parking	\$14 X 2; 27 miles @ \$.56/mile X 2 \$40 parking	= \$ 179
TOTAL ESTIMATED COST			= \$ 546.20
Justification: Explain in detail why trip/special expense is in the best interest of the college: Attending this conference is an expected component of being a recipient of National Science Foundation ATE grants. Compliance will support ARCC's efforts to secure federal grants in the future and bolster the college's reputation on the national stage.			
Requestor Signature	Print Name	Date	
	Christopher M. Lutz	9/12/2016	
Supervisor Signature	Date		
Vice President Signature	Date		
President Signature	Approved for an amount not to exceed \$	Not approved	

AMCC Out of State Travel Form 08/15/2015

Figure 11: Sample Out of State Special Expense form.

9. Sample Employee Expense Form

EMPLOYEE EXPENSE FORM

Date entered: SEMA4 _____ ISRS _____ Tran # _____ Expense Group ID _____

Employee Name Christopher Lutz	Job Title Chemistry Faculty	Barg Unit MSCF	Employee ID [REDACTED]
Employee Home Address [REDACTED]			
Home Campus: <input type="radio"/> Cambridge <input checked="" type="radio"/> Coon Rapids <input type="radio"/> Split <input type="radio"/> Anoka Tech			
In-State _____ Special Expense form attached? _____		Out-of-State _____ Special Expense form attached? _____	
Out-of-State Travel Form attached? _____		CC Totals: \$454.60	
Advance _____ Final Expense for this Trip? 455		Trip Dates: (Start/End) 10/26/2016-10/28/2016	

Date	Daily Description/Comments	Time Depart	Time Arrive	Travel From:	Travel To:	Vehicle Control #	Trip Miles:	Mile Rate *	Total (M x R)	Meals B	Meals L	Meals D	Meals (en overnight stay)	Meals (overnight stay)	Lodging	Conf / Reg Fee	Parking	TOTAL EXPENSE
10/26/16	Travel to airport	4:20 AM	4:50 AM	home	Airport		16	0.505	8.03									8.03
10/26/16	Airport Parking																36.60	36.60
10/26/16	Breakfast at airport													6.92				6.92
10/26/16	Lunch (Omni-Shorham)													16.50				16.50
10/26/16	Taxi from DCA to Omni-Shorham	11:12 AM	11:30 AM	DCA	Hotel													28.67
10/26/16	Conference registration															50.00		50.00
10/27/16	Dinner (Lapiz)													21.70				21.70
10/28/16	Dinner (Express Walkthrough)													16.43				16.43
10/28/16	Taxi from Omni-Shorham to DCA																	29.49
SUB-TOTAL:									8.03				61.61		50.00	36.60	\$214.40	

* Mileage rate for Jan 12014 is flat .56 and .49 **NEW RATE** as of Jan 1,2015 is 57.5 and 50.5

If using private car for out-of-state travel: What would lowest airfare to destination be

I declare under the penalties of perjury that this claim is just and correct and that no part of it has been paid except with respect to those advance amounts shown. I AUTHORIZE PAYROLL DEDUCTION OF ANY SUCH ADVANCES.

State employees and other officials using state funds traveling on state business and using commercial airlines cannot claim frequent flyer mileage as their own. Employees must certify that they have not claimed frequent flyer mileage for personal use when they apply for travel reimbursement. Any benefits received belong to the State.

Employee Signature [REDACTED]	Date 11/9/2016	Work Phone -1494
Supervisor Signature [REDACTED]		

OTHER EXPENSES			
Type	Date	Comments	Total
	10/26/16	Airfare MSP to DCA	235.20
	10/26-10/28	tips/gratuities	5.00
GRAND TOTAL:			\$454.60
Less Advance			
Total Amount to be Paid to Employee			
Total Amount to be Paid by Employee			

Figure 12: Sample Employee Expense Form

10. asdfds

Minnesota State Resources

0110-0998 salaries and Fringe

1010-3000 would be non-personnel from printing, phones, travel, supplies

3006-4000 are equipment and sensitive items they should be tagged with an asset tag and tracked. They belong to the grantor/federal agency and there are often special rights/budget lines approving equipment purchase. (items that last more than 1 year)

4001-8999 are unlikely in an academic grant as they include items like construction expenses.

9400-9406 would be revenue generated by the grant depending on grant source.

Figure 13: Minnesota State Budget Code Ranges

A. SENIOR PERSONNEL: PI/PD, Co-PI'S, Faculty and Other Senior Associates	Year 1 Grant Funds	Salary Calc's	ARCC Travel Calc	External Eval	Subaward Calcs	Indirect Costs	Salary Expenditures	Travel Ex
Dr. Doofenschmertz	\$9,880.00	Total requested	Total Requested	Total Requested	Total Requested	Total Request	\$25,560.00 (salary)	
Dr. Doittle	\$7,990.00	\$25,615.00	\$1,053.00	\$5,960.00	\$10,369.00	\$7,267.00	\$1,789.20 (retirement)	
Dr. Zhivago	\$7,660.00	Total plus Fringe					\$1,917.00 (FICA)	
Undergraduate students	\$85.00	\$32,764.00	Total Expenditures	Total Expenditures	Total Expenditures	Total Expenditures	\$1,899.11 (Insurance)	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)	\$7,149.00	Total Expenditure	\$904.42	\$2,960.00	\$10,354.66	\$7,267.00		
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000)		\$31,165.31						
equipment item 1		Remaining Salary	Remaining ARCC Travel	Remain Consultant	Remaining SubAward			
TOTAL EQUIPMENT		Totals	Totals	Totals	Totals	Remaining Indirect Totals		
		\$1,598.69	\$148.58	\$3,000.00	\$14.34	\$0.00		
E. TRAVEL								
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)	\$1,053.00		PROJECT TOTAL					
2. FOREIGN			Total requested					
			\$57,413.00					
F. PARTICIPANT SUPPORT COSTS			Total Expenditures					
4. OTHER			\$52,651.39					
G. OTHER DIRECT COSTS								
1. MATERIALS AND SUPPLIES			Remaining Project Total	Totals check				
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION			\$4,761.61	\$4,761.61				
3. CONSULTANT SERVICES	\$5,960.00							
4. COMPUTERS SERVICES								
5. SUBAWARDS	\$10,369.00							
6. OTHER								
H. TOTAL DIRECT COSTS (A THROUGH G)								
I. INDIRECT COSTS (SPECIFY RATE AND BASE)	\$7,267.00							
Name of indirect cost item								
Salaries and Fringe								
TOTAL INDIRECT COSTS								
J. TOTAL DIRECT AND INDIRECT COSTS (H+I)								
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.D.7.j.)								

Figure 14: Sample budget spreadsheet. Double Click to explore the document.

Federal Resources

1. **Proposal preparation:** The EvaluATE center has many resources for preparing a proposal for the first time available here: <http://www.evaluate.org/library/proposals/>
2. **Finding an evaluator:** Although this reference is for the ATE program of the NSF, you can get a start finding an evaluator here. <http://www.evaluate.org/resources/finding-an-evaluator/>
3. **Evaluation webinars:** a number of webinars are available here. <http://www.evaluate.org/category/webinars/>

References

¹ This is a sample endnote for practice navigating the document. Double-click the number again to return to your original place.

² National Science Foundation, *Research Terms and Conditions Overlay to the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance)*, 2 CFR § 200, https://www.nsf.gov/pubs/policydocs/rtc/rtcoverlay_march17.pdf Accessed 3/19/2018

³ National Science Foundation, *Chapter II: Proposal preparation instructions*, https://www.nsf.gov/pubs/policydocs/pappg18_1/pappg_2.jsp Accessed 2/22/2018

⁴ National Institutes of Health, *How to Apply Application Guide*, <https://grants.nih.gov/grants/how-to-apply-application-guide.html> Accessed 2/22/2018

⁵ Luka Partners (Lesiecki, M); EvaluATE (Wingate, L.); Mentor Connect (Craft, E.), *Evaluation for Non-evaluators*, webinar (<http://www.evaluate.org/category/webinars/>) 3/14/2018.

⁶ EvaluATE, *Example Project Logic Model*, <http://www.evaluate.org/resources/example-project-logic-model/>, Accessed 3-12-18

⁷ A worksheet for developing a logic plan is available at <http://www.evaluate.org/resources/lm-template>

⁸ EvaluATE (Wingate, L), *Resource: Finding and Selecting an Evaluator for Advanced Technological Education Proposals*, <http://www.evaluate.org/resources/finding-evaluator/> Accessed 2/22/2018

⁹ National Science Foundation, *Proposal and Award Policies and Procedures Guide*; Chapter I, subsection C. https://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/aag_1.jsp Accessed 3/14/2018

¹⁰ Levels of Review, UCI Office of Research, <https://www.research.uci.edu/compliance/human-research-protections/researchers/levels-of-review.html>, Accessed 3/30/2018

¹¹ Office of Research and Sponsored Projects, University of Louisiana-Lafayette, *Direct Costs vs. Indirect costs*, <https://vpresearch.louisiana.edu/pre-award/building-your-budget/direct-costs-vs-indirect-costs>, Accessed 2/22/2018

¹² National Science Foundation, *Proposal and Award Policies and Procedures Guide*; Chapter I, subsection D part 1. https://www.nsf.gov/pubs/policydocs/papp/aag_1.jsp

¹³ National Science Foundation, *Proposal and Award Policies and Procedures Guide*; Chapter VI, section 611.2 https://www.nsf.gov/pubs/manuals/gpm05_131/gpm6.jsp Accessed 2-27-18

¹⁴ National Science Foundation, *Proposal and Award Policies and Procedures Guide*; Chapter V, subsection A part 8a(i). https://www.nsf.gov/pubs/policydocs/pappguide/nsf10_1/aag_5.jsp, Accessed 2-27-18