

The Essentials of Technical Communication

THIRD EDITION

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New York Oxford
Oxford University Press

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Proposals and Progress Reports

Proposals and progress reports, two common types of workplace documents, can be written collaboratively or individually depending on the size of the projects. Many projects, such as those funded by the National Science Foundation or the National Institutes of Health, begin with proposals and require regular progress reports during their course. This chapter explains development strategies for both types of documents. However, any work done by an employee may require a status (progress) report submitted to one's supervisor to explain what has been accomplished. A project may begin with a verbal agreement between supervisor and employee, but the employee may be required to submit a progress report either as an e-mail message or as a short memo report. Progress or status reports serve as a major source of documentation to show that employees have performed their work.

To help you understand how to design and write proposals and progress reports, we first discuss the development of proposals and use a student's research project proposal as an example. We also provide additional annotated examples of progress reports to illustrate how these occur in work settings.

The *proposal*, as its name implies, describes proposed work or research, the reasons for the work, the methods proposed to accomplish the work, the estimated time required, and the expected cost.

The *progress report*, as its name implies, describes and evaluates a project as work occurs. Thus, if an individual or an organization decides to begin a work project or research project, particularly one that requires several months or even several years to complete, the individual or organization will report the progress on that project at intervals agreed upon when the proposal is accepted and the resulting agreement or contract is being negotiated.

Employees may also need to report progress on the full range of projects or problems on which they are working. In situations like these, the employee writes a progress report (or "status report," as it may be called) to inform supervisors or

other individuals about what has been accomplished in completing a job or solving a problem. The progress or status report thus becomes an official and even a legal record of work performed. Many organizations require employees to prepare annual status reports of their work, their accomplishments, and their objectives for the coming year.

Quick Tips

Keep in mind that proposals and progress reports are persuasive documents. You write to convince your reader of the merit and integrity of your work. In a proposal, you write to persuade your reader that you have a good idea, a good method for implementing the idea, and the experience necessary to manage the implementation—that you can achieve what you propose. In a progress report, you write to persuade the reader either that you are making good progress on your project or that you realize you aren't making good progress but know why and are taking appropriate steps to fix the problem.

PROPOSALS

The starting point of projects is often a proposal. A proposal offers to provide a service or a product to someone in exchange for money. Usually, when the organization—frequently a federal, state, or city government or a business enterprise—decides to have some sort of work or research done, it wants the best job for the best price. To announce its interest, the soliciting organization may advertise the work it wants done and invite interested individuals or organizations to contact it. In a university setting, the research and grants office may notify departments that money is available for research projects in a specific area. Faculty members submit project proposals that explain the research they envision; how much time they will need to complete the project; any financial resources required for equipment, salaries, and release time from regular teaching duties; and the goals and benefits of the research to the individual researcher, the university, and perhaps the public.

When an organization disseminates a description of the work it wants done, this document is usually called a *request for proposals* (RFP) or a *statement of work* (SOW). The soliciting organization may send selected companies an RFP/SOW that includes complete specifications of the work desired.

Alternatively, the soliciting organization may first describe the needed work in general terms and invite interested firms to submit their qualifications (Figure 9-1). This type of request is usually called a *request for qualifications* (RFQ). The organization may also place a notice of intent in newspapers, professional journals, or

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ports are persuasive documents. The merit and integrity of your proposal is your reader that you have a good idea, and the experience you can achieve what you need. You made the reader either that you realize that you aren't taking appropriate steps to

-NOTICE OF INTENT-Texas Department of Transportation Notice of Intent—Contract Number 17-8RFP1001. The Bryan District of the Texas Department of Transportation (TxDOT) intends to enter into two (2) contracts with prime providers pursuant to Texas Government Code, Chapter 2254, Subchapter A, and 43 TAC §§9.30-9.43, to provide the following services. The work to be performed shall consist of right of way surveys, aerial photography and digital terrain models for advance planning and PS&E. Work shall include, but is not limited to: on ground surveys, parcel plats, legal descriptions, right of way maps, establishment of horizontal and vertical control for aerial mapping, etc. for various construction projects within the Bryan District. A letter of interest notifying TxDOT of the provider's interest will be accepted by fax at (979) 778-9702, or by hand delivery to TxDOT, Bryan District, 1300 North Texas Avenue, Attention: Mr. Chad Bohne, P.E.; or by mail addressed to 1300 North Texas Avenue, Bryan, Texas 77803. **Deadline: Letters of interest will be received until 5:00 p.m. on Wednesday, September 3, 2012.** For more information regarding this notice of intent, please visit the TxDOT Internet Home Page located at www.dot.state.tx.us/business/professionalservices.htm or contact Cecelia McCord at (979) 778-9765. 8-10-08

FIGURE 9-1 Example Request for Qualifications from a Newspaper

A proposal offers to provide services for money. Usually, when a government or a business is hired, it wants the best. The soliciting organization may want individuals or organizations. The grants office may notify decisions in a specific area. Faculty research they envision; how financial resources required for teaching duties; and the researcher, the university, and

of the work it wants done, (RFP) or a *statement of work* (SOW) from companies an RFP/SOW is needed.

Describe the needed work in terms of qualifications (Figure 9-1). The organization (RFQ). The organization, professional journals, or

newsletters. The US government posts its RFQs online at <http://www.grants.gov/>. The responding organizations explain their past accomplishments, giving the names of companies for which they performed work, describing the work they did, and giving references who can substantiate the organizations' claims. Based on the responses it receives, the soliciting organization will send full descriptions of the work (RFPs/SOWs) to the groups it believes have submitted the best qualifications. The responses submitted to an RFQ or a notice of intent may be called *letters of interest* or *intent*.

In short, each aspect of the solicitation process, from the RFQ to the RFP/SOW, has an appropriate use, but one or more of them is necessary to initiate action on a project.

Example RFP. The vice president for research at a large university has located funding opportunities for collaborative research grants. These will be available to faculty across various disciplines. He issues an RFP via e-mail to the university's research faculty (see Figure 9-2).

The context of proposal development. Because proposals are time-consuming to write—most require substantial research and analysis on the part of the proposing organization—individuals and organizations wishing to respond to an RFP study it carefully. They do not want to submit a proposal that is unlikely to be accepted. Thus, the proposer—whether a university professor

January 5, 2015

MEMORANDUM

TO: Distribution A

FROM: Dr. Rolfe D. Auston
Vice President for Research

SUBJECT: **2015 ABC University-Conacyt: Collaborative Research Grant Program**

The Office of the Vice President for Research is pleased to issue a request for proposals for the ABCU-Conacyt: Collaborative Research Grant Program. This program annually awards one-year grants of up to \$24,000 to faculty members to advance inter-institutional cooperation in science, technology, and scholarly activities that have a direct application in industry or government through the complementary efforts of scientists and scholars from ABCU and Mexican institutions.

Two main objectives of the Collaborative Research Grant Program are to provide seed funding to 1) support the completion of a 12-month inter-institutional project, and 2) support the development and submission of proposals for external funding of research from competitive granting agencies both domestic and international (e.g., NSR, NIH, DOE, World Bank, NATO, UNESCO, etc.) and industry.

ABCU and Conacyt have agreed on several research priority areas as noted in the request for proposals. The research proposed must be linked to the private sector and have direct application to solving an industrial or governmental problem. All proposals must include research that directly improves security for the citizens of the region or explores issues relating to security challenges facing both countries.

A principal investigator (PI) is required from both Texas ABCU and a Mexican institution. The PI from ABCU must be a tenured or tenure-track faculty member. The PI from Mexico must be a scientist or scholar from any Mexican institution of higher education and research that is registered with Conacyt. Other investigators may include faculty from branch campuses or Mexican faculty, postdoctoral students, graduate students, or research staff. A letter of intent must be received by 5:00 p.m. on Friday, March 5, 2015, to be eligible to submit a full proposal. Full proposals must be submitted, routed electronically for appropriate signatures, and received by 5:00 p.m. on Friday, April 30, 2015. The request for applications is available on the Web at <http://conacyt.abcu.edu>.

Additional information may be obtained by contacting Ms. Catharine J. Restivo (916-555-555; cjr@abcu.edu).

FIGURE 9-2 E-mail Request for Proposals

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As. Catharine J. Restivo

seeking research funds or a highway construction firm seeking to win a contract from a county to upgrade its rural roads—will carefully approach the decision to prepare a proposal.

The individual or the company must first decide whether to respond to the proposal. Can we do the work requested? Can we show that we can do this work, based on what we have already done? Can we do it within the time limit given in the RFP? Businesses responding to RFPs must address economic issues. How much will our proposed approach cost? How much money can we make? Who else will be submitting proposals? What price will competitors likely quote for the same work? Can we compete? What other projects do we have under way? Could problems arise that would make us unable to complete the job on time and at the price we quote? Do we have personnel qualified to work on this project?

The e-mail RFP in Figure 9-2 would elicit other questions. Is my field applicable to the research opportunity described here? Can I develop a collaborative proposal by the deadline? What types of national security topics would be most likely to attract funding? The university research office often has a person who helps answer these questions.

Many business entities requesting proposals will hold a bidders' conference at which companies interested in submitting a proposal can ask questions about the project or seek clarification of the needs described in the RFP. Most RFPs require that proposals be submitted by a deadline and contain specific information. Proposals that miss the deadline or do not contain the information requested are ordinarily omitted from consideration. Therefore, once an organization decides to submit a proposal, staff members carefully study the RFP and identify the information requirements. Each information requirement is given to an individual or a group who will be responsible for furnishing necessary material and data.

Some proposals, such as university research proposals, may be written by one or two persons. In complex proposals, however, different sections may be written by individuals in different areas of the organization. An editor or proposal writer will then compile the final document. This writer/editor may be assisted by readers who help check the developing proposal to be sure that all requested information is included and that the information is correct. Many proposals have to conform to strict length requirements. Proposals that do not conform will be eliminated from consideration.

Once the proposal has been written and submitted, it becomes a legally binding document. The proposing company or individual is legally committed to do what is described in the proposal, at the cost, and within the time limit stated. For that reason, the proposing organization carefully checks all information for accuracy.

When a large number of bidders submit proposals in response to an RFP, the soliciting organization may select several finalists and allow each finalist to give an oral version of the proposal. During oral presentations, the soliciting group asks questions. Representatives of the proposing groups have one more opportunity to argue for the value of what they propose, the merits of their organization, and the justification for the cost attached to the proposed work.

Students may be required to submit proposals for semester research projects or for other university programs, such as research opportunities with faculty. These proposals (two appear in this chapter) provide you with good practice in developing proposals you may write in your career: for example, government grants to fund your research, approvals to launch a work-related project, and actual bid proposals to help your business organization win work projects. Explaining to a potential employer during an interview that you have studied and written at least one proposal and a progress report can help you win a job offer.

Effective argument in proposal development. All writing is persuasive: it must convince the reader(s) that the writer has credibility and that the writer's ideas have merit. However, the success of a proposal rests totally on the effectiveness of the argument—how convincingly the writer argues for a plan, an idea, a product, or a service to be rendered and how well the writer convinces the reader that the proposing organization offers the best qualifications to do the work or research needed. In planning the proposal, the proposer must harmonize the soliciting company's needs with the proposer's capabilities. The writer must be acutely sensitive to what readers will be looking for but not propose action outside the capability of the proposing individual or organization. The proposing individual or organization has an ethical responsibility to explain accurately and specifically what work can be done and what work cannot be done so that no possibility exists of deceiving readers by making promises that cannot be fulfilled.

The following questions can help you analyze the effectiveness of the argument, from the solicitor's perspective, whether in a written or an oral proposal:

- What does the soliciting organization really want?
- What is the problem that needs to be solved?
- What approaches to the solution will be viewed most favorably?
- What approaches will be viewed unfavorably?
- What objections will our plan elicit?
- Can we accomplish the goals we propose?

To answer these questions, the proposer may be required to do research on the organization, its problems, its corporate culture, the perspective and attitudes stemming from its corporate culture, and its current financial status, goals, and problems. As the proposal develops, the writer should examine it from the intended reader's perspective.

- What are the weaknesses of the plan, as we—the writers—perceive them?
- How can we counter any weaknesses and the reader's potential objections?
- How can we make our plan appealing?
- How can we show that we understand their needs?
- How can we best present our capability to do this project?
- What are our/my strengths?
- From our own knowledge of our organization, what are our weaknesses—in personnel and in overall capability to complete this project as proposed?

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- Do we need to modify our proposed plan to avoid misleading readers about our ability to perform certain tasks on time, as proposed, and at cost?
- Can we sell our idea without compromising the accuracy of what we can actually do?

As a proposal writer, you should consider each question and determine what evidence you will need to support the merits of your idea and the arguments needed to refute any objections. Every sentence in your proposal should argue for the merits of your plan and your or your organization's ability to complete it. Although the proposal must be designed as a sales document, you have an ethical obligation to present a plan that meets the soliciting organization's needs and requirements. (In considering the ethical issues that confront proposal writers, you will want to review Chapter 3, "Writing Ethically.")

Standard sections of proposals. Proposals generally include three main divisions: a summary, a main body, and attachments. The main body focuses on the three main parts of the proposal: the proposal's objectives (technical proposal), methods for achieving objectives (management proposal), and project cost (cost proposal). Proposals vary, but you will see the following segments embedded in some way:

- Project summary
- Project description (technical proposal)
 - Introduction
 - Rationale and significance
 - Plan of the work
 - Scope
 - Methods
 - Task breakdown
 - Problem analysis
 - Facilities and equipment
- Personnel (management proposal)
- Budget (cost proposal)
- Conclusion
- Appendices

Major business proposals are submitted in complete report format, which requires a letter of transmittal, a title page, a submission page (perhaps), a table of contents, and a summary—all items discussed in Chapter 8. Shorter proposals may be written in a memo or letter format. Many government proposals must be submitted online only. Whatever the format, the main elements will be required, although how they appear will vary with each proposal. In most RFPs, the soliciting organization explains what should be included in the proposal (either specific information to be included or major elements). Often, RFPs indicate the maximum number of pages allowed in a proposal. Writers should follow these instructions carefully to ensure that the proposal is not rejected during

the initial screening process because it fails to follow the preparation guidelines stipulated by the RFP.

Summary. The summary is by far the most important section of the proposal. Many proposal consultants believe that a project will be accepted or rejected based solely on the effectiveness of the summary, your readers' first introduction to what you are proposing. The summary should concisely describe the project, particularly how your work meets the requirements of the soliciting organization, your plan for doing the work, and your or your company's main qualifications. The summary should be a concise version of the detailed plan, but it should be written to convince readers that you understand what the soliciting firm needs and wants, that what you are proposing can be done as you describe, and that your approach is solid because you have the required knowledge and expertise. After reading the summary, readers should want to read more of your proposal.

Project description (technical proposal). The technical proposal describes what you or your company proposes to do. The description must be as specific as possible. The technical proposal has a number of elements.

Introduction. The proposal introduction should explain what you are proposing, why you are proposing this idea, and what you plan to accomplish. The introduction contains the same elements as any introduction. In short proposals, the summary and introduction can be combined.

Rationale and significance. Much of your success in convincing readers that you should be granted a contract to do the work you propose will rest on your success in convincing them that you understand the project. In the section on rationale and significance, you need to make clear that you understand readers' needs—as stated in the summary or introduction—and that you have designed your goals by analyzing and defining their needs. Although you will clearly be selling your idea, you should recognize and answer any questions your readers may have as you argue the merits of your project. Convincing your readers that you fully understand what they are looking for is critical in establishing your credibility.

In short,

- You may want to define the problem, to show that you understand it.
- You may want to explain the background of the problem and how it evolved, by providing a historical review of the problem.
- If you are proposing a research project, you may want to explain why your research needs to be done and what results can be expected from your research.
- You may want to describe your solution and the benefits of your proposed solution.

Of greatest importance, however, is the *feasibility* of the work you propose. Is your proposed work doable? Is it suitable, appropriate, economical, and practicable? Have you given your readers an accurate view of what you can and will do?

Plan of the work. The section on the work plan is also critical, particularly to expert readers who will attempt to determine whether you understand the breadth

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Problem analysis carefully analyze where difficulties

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section of the proposal. Accepted or rejected based on the introduction to what will be the project, participating organization, your main qualifications. The proposal should be written to firm needs and wants, and that your approach is realistic. After reading the proposal.

A good proposal describes the project and must be as specific as possible.

1. What are you proposing to accomplish? The introduction in short proposals, the

persuading readers that you will rest on your success. The section on rationale and readers' needs—as you designed your goals by clearly be selling your idea, others may have as you are at you fully understand credibility.

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work you propose. Is your plan realistic, and practicable? What can and will do? It is critical, particularly to understand the breadth

of the work you are proposing. In this section, you will describe how you will go about achieving the goals you have stated. You will specify what you will do in what order, explaining and perhaps justifying your approach as you believe necessary. A realistic approach is crucial in that a knowledgeable reader will sense immediately if your plan omits major steps. A flawed work plan can destroy your credibility as well as the merits of the goals or the solution you are proposing.

Scope. The work plan section may need to describe the scope of the proposed work. What will you do and not do? What topics will your study or your work cover and not cover? What are the limits of what you are proposing? What topics will be outside the scope of your project? As the writer of the proposal, you have both an ethical and a legal obligation to make clear to your readers the limits of your responsibility.

Methods. A work plan may also require a statement of the methods you will use. If you are going to do on-site research, how will you do this research? If you plan to collect data, how will you do so? How will you analyze this data? How will you guarantee the validity of the analysis? If your research includes human subjects, how will you make sure that their participation is voluntary and their privacy is protected? If you are going to conduct surveys or interviews, how will you do so and what questions will you ask? If you plan to do historical research or a literature review of a topic, how will you approach such a review to ensure that your findings are representative of what is currently known about a subject area? What precautions will you take to verify that your research is conducted according to applicable ethical and legal standards? A precise, carefully detailed description of your work methods can add to your credibility as one who is competent to perform the proposed work.

Task breakdown. Almost all proposals require you to divide your work into specific tasks and to state the amount of time allotted to each task. This information may be given in a milestone chart, as illustrated in the methods section of the student research proposal (Case 9-1). The task breakdown indicates how much time you plan to devote to each task. A realistic time schedule also becomes an effective argument. It suggests to readers that you understand how much time your project will take and that you are not promising miracles just to win approval of your proposal or business plan.

If a project must be completed by a deadline, the task breakdown and work schedule should indicate exactly how you plan to fit every job into the allotted time. However, do not make time commitments that will be impossible to meet. Readers who sense that your work plan is artificial will immediately question your credibility. Remember, too, that a proposal is a binding commitment. If you cannot do what you propose, what the soliciting organization requires within the required time, you can destroy your professional credibility and leave yourself open to litigation.

Problem analysis. Few projects can be completed without problems. If you have carefully analyzed the problem or work you intend to do, you should anticipate where difficulties could arise. Problems that may be encountered can often be

discussed in the rationale section. However, if you discover major obstacles that you believe will occur during the course of the project, you may wish to isolate and discuss these in a separate section. Many organizations that request work or solicit research proposals are aware of problems that may arise. Reviewers in these organizations look carefully at the problem analysis section, wherever it occurs, to see whether the proposer has anticipated these problems and explained the course of action that will be followed in dealing with them. Anticipating and designing solutions to problems can further build your credibility with readers, who will not be impressed if you fail to diagnose points in your work plan that could be troublesome and even hinder your completion of the project as proposed.

Facilities and equipment. The facilities section of the proposal is important if you need to convince the reader that your company has the equipment, plant, and physical capability to do the proposed work. Facilities descriptions are particularly crucial if hardware is to be built at a plant site owned by your organization. Even in research proposals, your readers may want to know what resources you will use. Sometimes existing facilities are not adequate for a particular job and your company must purchase specific equipment. The facilities section enables you to explain this purchase and how it will be included in the cost proposal.

Researchers may need to travel to visit special libraries or research sites. The amount of money needed for this travel will be part of the cost proposal. Thus, the nature of any extra research support, its importance, and its cost to the project should be explained here.

Personnel (management proposal). Any technical proposal or project is only as good as the management strategy that directs it. The management proposal should explain how you plan to manage the project: who will be in charge and what qualifications that person or team has for this kind of work. Management procedures should harmonize with the methods of pursuing the work described in the technical proposal.

Descriptions of your management philosophy and hierarchy should clearly reflect your company's management philosophy and culture. Readers should see the same kind of management applied to the proposed work as to the company and other projects it manages. Any testimony to or evidence of the effectiveness of the management approach will lend credibility to the technical proposal. Proposal reviewers must be convinced that you and your organization have a sound approach supported by good management of that approach.

In research proposals, the researcher who is soliciting funds will want to explain his or her expertise in the subject area proposed. This explanation may focus on educational background, previous projects successfully undertaken, published research on the topic, and general experience.

Budget (cost proposal). The cost proposal is usually the final item in the body of the proposal, even though cost may ultimately be the most crucial factor in industrial proposals. Cost is usually given last and appears as a budget for the length of the proposal period. The technical and management sections of the proposal, with their descriptions of methods, tasks, facilities, required travel, and personnel,

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should help justify the cost. They should have already explained the rationale for items that will produce the greatest cost. However, any items not previously discussed in the technical and management sections—such as administrative expenses, additional insurance benefit costs, and unexpected legal costs—should be explained. An itemized budget, often submitted as a separate document, includes items such as the proposing organization's liability for not meeting project deadlines, for cost overruns, and for unforeseen labor strikes and work stoppages. Many budget sections include standard statements such as descriptions of union contracts with labor costs, insurance benefit costs, nonstrike costs, and statements of existing corporate liability for other projects—any existing arrangements that affect the cost of the proposed contract. Clearly, the budget should explain exactly how much the project will cost and how the cost is determined. The extensiveness of the budget depends on the magnitude of the project.

Conclusion. The proposal includes a final section that repeats what the proposal offers the potential client or the soliciting agency, why you or your company should be selected to perform the work, and the benefits that the project, when completed, will yield for the client. The conclusion presents the final restatement of your central argument.

Appendices. As in any report, the appendix section includes materials to support information you give in the main body of the proposal—in the technical, management, or cost proposals. For example, the appendix might include résumés of principal investigators, managers, or researchers. These résumés should highlight their qualifications as they pertain to the specific project.

Case 9-1: Research Proposal

The undergraduate research office at a university solicits proposals from undergraduate students who wish to pursue research with a faculty member. Case Document 9-1 is a research proposal written by an undergraduate chemical engineering major, Evan Cherry. The proposal includes sections required by the solicitation for these undergraduate research proposals. Readers of this proposal will be faculty from science and engineering. For that reason, the proposal is highly technical and is prepared to meet the strict length requirements given in the RFP.

CASE DOCUMENT 9-1: EVAN CHERRY

Proposal for Undergraduate Research Scholars Program: Effects of Simvastatin and Fluvastatin on Endothelial Invasion

Summary

Millions of people take cholesterol-lowering medications. This proposal investigates whether the cholesterol medications simvastatin (Zocor®) and fluvastatin (Lescol®) can additionally alter a key step of wound healing. We will specifically determine whether these medications affect angiogenesis, the formation of new blood vessels from preexisting structures, using a model of endothelial cell invasion. We hypothesize that simvastatin and fluvastatin may have additional effects unrelated to reducing cholesterol. The specific aims are as follows:

1. Determine the effects of simvastatin and fluvastatin on endothelial invasion.
2. Determine whether the effects on invasion are a direct result of altered cholesterol levels or due to inhibition of 3-hydroxy-3-methylglutaryl coenzyme A (HMG CoA) reductase activity.
3. Determine the signaling mechanisms affected by simvastatin and fluvastatin.

Introduction

I. Atherosclerosis and Statins

Cholesterol regulation has become one of the primary methods for preventing heart disease. HMG-CoA reductase inhibitors (statins), the first line of treatment for inhibiting cholesterol synthesis, lower blood cholesterol levels

and significant decrease by 60%.

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Fig

II. Angiogenesis

Patients treated including a low dose, is an important helped form

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For our previous responses in a

and significantly reduce both atherosclerosis¹ and the instance of heart disease by 60%.²

Atherosclerosis is the buildup of fatty plaques along blood vessel lining. Various stress factors oxidize the cholesterol transport molecule low-density lipoprotein (LDL). Oxidized LDL adheres to the lining of blood vessels and encourages foam cell accumulation and plaque growth, which reduces blood flow and can cause heart attack.³ Plaque rupture can result in a stroke.

The Agency for Healthcare Research and Quality found that in 2005 29.7 million people purchased statins for an estimated total of 19.7 billion dollars.⁴ Two examples of statins are shown below (Figure 1). Simvastatin is derived from lovastatin, a naturally occurring compound in the fungus *Aspergillus terreus*. Fluvastatin, a synthetic statin, has a visibly different structure.

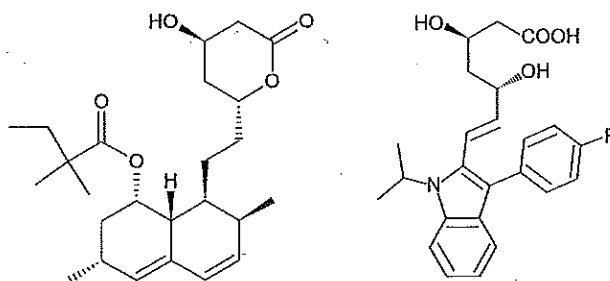


Figure 1 The structures of simvastatin and fluvastatin differ substantially.

II. Angiogenesis

Patients treated with statins exhibit other cardiovascular protective effects, including a lower incidence of cancer.⁵ New blood vessel growth, or angiogenesis, is an important part of tumor growth and wound healing. These data have helped form the basis for our hypothesis that statins may affect angiogenesis.

During angiogenesis, endothelial cells lining blood vessels respond to extracellular signals and change into invading structures (Figure 2). The endothelial cells enter the surrounding matrix and form new blood vessels. In wound healing, the process relies on platelets, fibroblasts, and neighboring endothelial cells to close the wound. Endothelial cells propagate across the gap until they make contact with other endothelial cells and cease multiplying. The simultaneous combination of lipid inducers and growth factors is required for endothelial invasion.⁶

For our project, we will investigate if statin therapy changes invasion responses in a model reproducing angiogenesis during wound healing.

continued

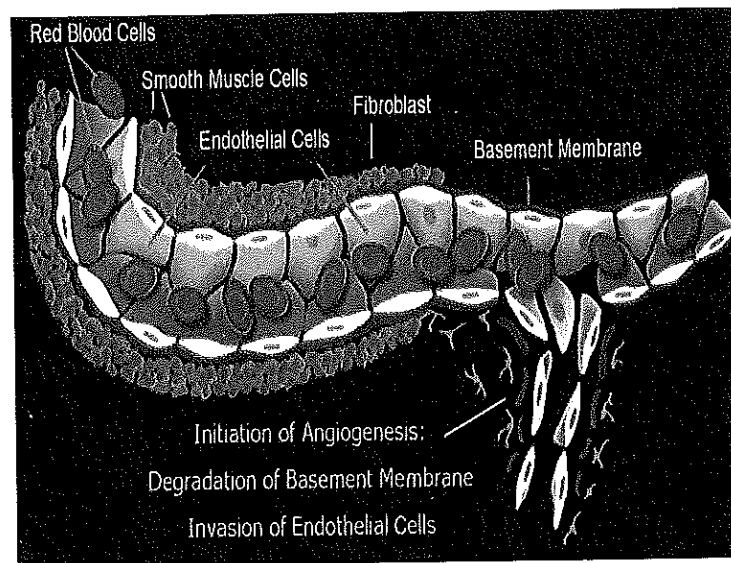


Figure 2 Endothelial invasion begins angiogenesis.

Project Description

We will evaluate the effects of statin therapy on endothelial invasion and determine whether the effects stem from cholesterol mediation or other processes. My project consists of three aims:

1. Determine the effects of statin therapy on endothelial invasion.

We will conduct invasion experiments using statin-pretreated endothelial cells and quantify both the number of cells invading and the invasion depth.

2. Determine whether the effects on invasion are a direct result of altered cholesterol levels or HMG CoA reductase.

We will analyze cholesterol levels in the cells using a commercially available kit and decrease cholesterol levels.

3. Determine how simvastatin and fluvastatin alter signaling.

Preliminary data indicate that several proteins mediate invasion responses. We will analyze levels of activated proteins at various time points of invasion.

Methodology and Timeline

Dr. Bayless's lab implements an artificial angiogenesis model using three-dimensional collagen that mimics the extracellular matrix. We place collagen solution containing nutritive media and sphingosine-1-phosphate (S1P).

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S1P is a lipid that signals the endothelial cells to invade the collagen matrix.⁷ We add human endothelial cells to the top surface of the collagen. The cells form a single layer and attach to the gel. We then add nutritive medium and growth factors.

After the cells incubate for 18–24 hours, we preserve the cells with formaldehyde before staining with 4',6-diamidino-2-phenylindole, a molecule that causes nuclei to fluoresce under ultraviolet light. This allows us to count the number of invading cells before we stain them with toluidine blue and cut cross-sectional slices. Photographs show invading cells, and photography software measures the depth of the invading cells (Figure 3).

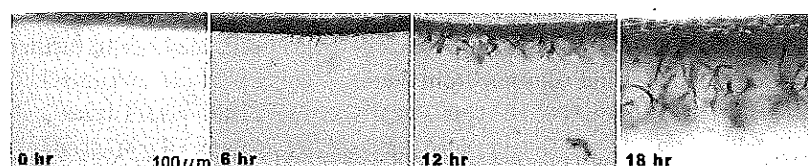


Figure 3 Endothelial cells invade the three-dimensional matrix.

To complete *Aim 1* we will place cells pretreated with simvastatin or fluvastatin in assays as shown in Figure 3. The invasion density and depth will be counted. All experiments will be confirmed three times.

To complete *Aim 2* we will measure cellular cholesterol levels using a commercially available kit and measure any differences in cholesterol synthesis between fluvastatin and simvastatin. The cholesterol profile will tell us whether the two compounds comparably inhibit cholesterol.

If we observe any differences in cholesterol levels or invasion, we will assume that these effects are due to decreased HMG CoA reductase activity. To confirm this, we will knockdown HMG CoA reductase by delivering a small hairpin RNA sequence to the endothelial cells using lentiviruses produced in the Bayless lab. We will check gene knockdown by Western blot and analyze the behavior of these cells in our invasion model.

If fluvastatin or simvastatin affect invasion responses, we will assume they are altering signaling events that control invasion. Two of these events are phosphorylation of Akt and p42/44 MAP kinase (Figure 4). To complete *Aim 3* we will treat cells with simvastatin or fluvastatin and extract proteins over time. For the Western blot, we will line up the treated and control extracts on an acrylamide gel and separate them by electrophoresis.

continued

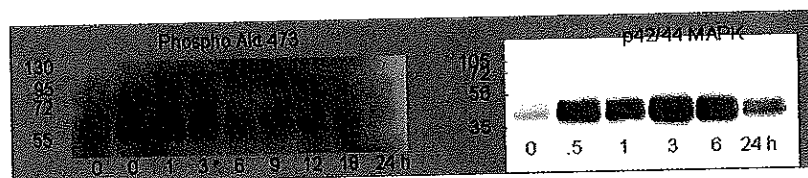


Figure 4 Western blots show Akt and p42/44 levels vary with invasion time.

We will specifically look for differences in activation of Akt and ERK p42/p44. While we do not know all the proteins involved in the invasion response, we do know that these proteins occur early in the process.

The possibility exists that simvastatin and fluvastatin have no effect on these designated proteins; we can then conclude that effects may occur further down the pathway and continue from there.

TABLE 1 The proposed process spans 24 weeks and finishes early April 2009

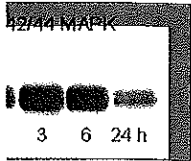
Fall 2008											
Week #	1	2	3	4	5	6	7	8	9	10	11
Week of	9/21-9/27	9/28-10/4	10/5-10/11	10/12-10/18	10/19-10/25	10/26-11/1	11/2-11/8	11/9-11/15	11/16-11/22	11/23-11/29	11/30-12/6
Aim 1	Investigating the effects of statins on endothelial invasion										
Aim 2	Regulation of Akt and ERK										
Report	Conducting CMT										
Spring 2009											
Week #	12	13	14	15	16	17	18	19	20	21	22
Week of	12/7-12/13	12/14-12/20	12/21-12/27	12/28-1/3	1/4-1/10	1/11-1/17	1/18-1/24	1/25-1/31	2/1-2/7	2/8-2/14	2/15-2/21
Aim 3	Investigating the effects of statins on endothelial invasion										
Aim 4	Regulation of Akt and ERK										
Report	Conducting CMT										

Qualifications

I am a junior chemical engineering major with an interest in medicine and healthcare. I have been employed as a pharmacy clerk and am a phlebotomist. Following graduation, I plan to enter an MD/PhD program. This past summer I worked with Dr. Bayless on the statin project during the Summer Undergraduate Research Program at the Health Science Center and gained experience performing invasion experiments.

I have completed the following elective courses in addition to my major while maintaining a GPA of 3.9.

- Cell & Molecular Biology (BIOL 213)
- Biochemistry (BICH 303)
- Genetics (GENE 301)



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References

1. Nissen, S., S. Nicholls, et al. "Effect of Very High-Intensity Statin Therapy on Regression of Coronary Atherosclerosis." *Journal of the American Medical Association* 295, no. 13 (2006): 1556-1565.
2. Law, M., N. Wald, A. Rudnicka. "Quantifying Effect of Statins on Low Density Lipoprotein Cholesterol, Ischaemic Heart Disease, and Stroke: Systematic Review and Meta-Analysis." *British Medical Journal* 326 (2003): 1423.
3. Libby, P., M. Aikawa, U. Schonbeck. "Cholesterol and Atherosclerosis." *Biochimica et Biophysica* 1529, no. 1-3 (2000): 299-309.
4. Stagnitti, Marie N. *Statistical Brief #205: Trends in Statins Utilization and Expenditures for the U.S. Civilian Noninstitutionalized Population, 2000 and 2005*. Medical Expenditure Panel Survey (2008).
5. Demierre, M., P. Higgins, S. Gruber, E. Hawk, S. Lippman. "Statins and Cancer Prevention." *Nature Reviews Cancer* 5 (2005): 930-942.
6. Davis, G., K. Bayless, A. Mavila. "Molecular Basis of Endothelial Cell Morphogenesis in Three-Dimensional Extracellular Matrices." *Anatomical Record* 268, no. 3, (2002): 252-275.
7. Bayless, K., G. Davis. "Sphingosine-1-Phosphate Markedly Induces Matrix Metalloproteinase and Integrin-Dependent Human Endothelial Cell Invasion and Lumen Formation in Three-Dimensional Collagen and Fibrin Matrices." *Biochemical and Biophysical Research Communications* 312, no. 4 (2003): 903-913.

Case 9-2: Project Proposal

The preveterinary honor society at ABC University has invited students to propose and then write, if the proposal is accepted, a discussion of issues important to future veterinarians. Sarah Irving proposes a report that discusses the increasing role of animal rehabilitation in veterinary practice. This proposal includes a summary, a list of topics, methods to be used in developing the topic, a tentative report outline, and an initial list of sources. Since it deals with a non-technical topic, the level of language needs no technical detail. The audience for the report will be other preveterinary students and perhaps faculty who work with the preveterinary society.

CASE DOCUMENT 9-2

MEMORANDUM

TO: Dr. Elizabeth Tebeaux **DATE:** February 22, 2014
FROM: Sarah Irving
SUBJECT: Proposal for research report—Is animal rehabilitation the future of veterinary medicine?

Subject and Purpose of the Proposal

Animal rehabilitation is not currently accepted as a veterinary specialty and is not widely developed. The growing willingness of owners to pay for rehabilitation treatments is creating a demand for more research into this field and a way to explain animal rehabilitation to the public. More widespread knowledge of the benefits of this care would encourage more veterinarians to practice or write referrals for animal rehabilitation.

My objective is to create a report that will explain to veterinarians, preveterinary students, and the public where the field of animal rehabilitation is now and how animal rehabilitation will affect the future of veterinary medicine.

Rationale for the Topic and Approach—Its Importance as an Issue

Veterinary patient care is moving toward the level of in-depth planning and quality of care required for human medical care. Owners expect their pets to receive the same level of care they would receive. Options such as physical therapy, prosthetics, and pain management treatments like acupuncture and medication are often used in treating humans. Though these techniques are

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Issues Address

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being adapted for animal patients, the practice of animal rehabilitation is not widely developed or recommended by veterinarians.

In the last decade many advances in procedures have been made that make animal rehabilitation a feasible part of veterinary medicine. Few veterinarians practice rehabilitation because of the lack of research into rehabilitation methods, results of rehabilitation, and patient benefits.

Growing public awareness of animal rehabilitation is leading to increased demand. The newness of the field leaves few resources for veterinarians, pre-veterinary students, and the public to learn about this growing field. I will research what advances have been made in the field of animal rehabilitation and how animal rehabilitation affects patient care.

I will use articles from peer-reviewed journals and answers written by specialists involved in the field to gather data about animal rehabilitation. To obtain firsthand knowledge from specialists in the animal rehabilitation field, I will e-mail surveys to the specialists. To gather articles, I will use databases and Google Scholar.

Issues Addressed in the Proposal

- Definition of animal rehabilitation
- Unresolved issues in the field of animal rehabilitation
- Direction the field of animal rehabilitation is headed
- Why veterinarians and future veterinarians should practice animal rehabilitation
- How animal rehabilitation relates to the future of veterinary medicine

Methods to Research the Topic

To guarantee the validity of my data, I will use articles from peer-reviewed journals and answers written by specialists involved in the field. These specialists will include veterinary rehabilitation practitioners and researchers in the animal rehabilitation field. To gather articles for my project, I will use databases owned by Texas A&M libraries and Google Scholar. These databases include the following:

- Academic Search Complete
- OmniFile Full Text Mega
- Medline (OVID)

To obtain firsthand knowledge from specialists in the animal rehabilitation field, I will e-mail surveys to the specialists. I have collected names of veterinarians who have written articles about veterinary rehabilitation. I will e-mail

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them a short three- to five-question survey about their experiences in animal rehabilitation.

Proposed questions

To veterinarians:

- What kinds of treatment do you offer?
- What would you like to tell veterinary students considering rehabilitation practices?
- What would you say the public perception of animal rehabilitation is?
- What is your most common procedure?
- What is the perception of other veterinarians about animal rehabilitation?

To other rehabilitation specialists:

- What would you say the public perception of animal rehabilitation is?
- What is the perception of other veterinarians about animal rehabilitation?
- What would you like to tell veterinary students considering rehabilitation practices?

I will have these e-mails checked for readability by Dr. Tebeaux before I send them. I will make the e-mails as easy to answer as possible, to get the most responses. I will request that all e-mail replies be sent within 2 weeks of receiving the e-mail survey so that I may use the information in my report.

To make sure my data are the most current available, I will continue researching for the next 4 weeks. This will give me time to find all sources created up to 1 month before my report is due.

Work Schedule

To complete my report on time using the most data available, I will follow the schedule below.

Week 1 February 21–27	Draft e-mails to animal rehabilitation specialists, search for more sources, read sources, and gather names and e-mail addresses of specialists
Week 2 February 28–March 6	Have e-mails checked for readability, send e-mails, read sources
Week 3 March 7–13	Continue searching for and reading sources
Week 4 March 14–20	E-mail replies due by this week, start reading replies, continue searching for and reading sources
Week 5 March 21–27	Turn notes on sources and surveys into rough draft
Week 6 March 28–April 3	Edit rough draft, print, read aloud, edit again

Week 7
April 4–10

Week 8
April 11–15

April 15

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Week 7 April 4-10	Have others edit rough draft
Week 8 April 11-14	Final editing
April 15	Turn in project

Tentative Outline of the Report

- I. Letter of transmittal
- II. Title page
- III. Definition of animal rehabilitation
 - a. History of animal rehabilitation
 - b. Types of animal rehabilitation
 - i. Physical therapy
 - ii. Hydrotherapy
 - iii. Prosthetics
 - c. The developing demand for animal rehabilitation
- IV. Unresolved issues in the field of animal rehabilitation
 - a. The animal pain management debate
 - b. Who is qualified to practice animal rehabilitation
 - i. The American Veterinary Medical Association position
 - ii. The American Physical Therapy Association position
 - c. What certification programs exist?
 - i. Canine Rehabilitation Institute
 - ii. University of Tennessee College of Veterinary Medicine Certificate Program in Canine Rehabilitation
 - iii. Canine and Equine Physiotherapy Training in England
 - d. Organizations formed to promote animal rehabilitation
 - i. Institute of Registered Veterinary and Animal Physiotherapists
 - e. State government actions to date
 - f. Owner involvement in the rehabilitation process
- V. What is the future of animal rehabilitation?
 - a. Recent developments in the field
 - b. Establishment of a specialty
 - c. Animal plastic surgery
 - d. Greater public awareness
- VI. Why practice animal rehabilitation?
 - a. Good for business, good veterinary practice, good for the clinic's reputation
 - b. Advice for preveterinary students considering a future as an animal rehabilitation practitioner
- VII. Is animal rehabilitation the future of veterinary medicine?
- VIII. Bibliography

continued

Initial List of Resources

- Brockett, John E. "Why Give Pain Medication—Patient Care, Image or Profit?" *DVM: The Newsmagazine of Veterinary Medicine* 39.2 (2008): 41. Print.
- Downing, Robin. "Putting the New Pain Management Guidelines into Practice." *Veterinary Medicine* 102.11 (2007): 704–705. Print.
- Foley, Denise. "Life with a Disabled Pet." *Prevention* 58.2 (2006): 198–201. Print.
- Nolen, R. S. "Pet Rehab Becoming Mainstream Practice." *Journal of the American Veterinary Medical Association* 235.7 (2009): 798–799. Print.
- Payne, Richard M. "Canine and Equine Physiotherapy." *Veterinary Record: Journal of the British Veterinary Association* 165.4 (2009): 122. Print.
- Sayre, Carolyn, and Robert Horn. "Fake Fins, Plastic Paws." *Time* 170.10 (2007): 49–51. Print.
- Skernitvitz, Stephanie. "Rehab Gives Animals Swifter Road to Recovery, DVM Says." *DVM: The Newsmagazine of Veterinary Medicine* 39.10 (2008): 1s–12s. Print.
- Smith, Sarah D. "Petting with a Purpose." *Natural Health* 36.3 (2006): 99–100. Print.
- Stein, Robert M., and Stephanie Ortel. "Postsurgical Pain Management: Take a Pre-Emptive Approach." *DVM: The Newsmagazine of Veterinary Medicine* 39.7 (2008): 44–46. Print.
- Van Dyke, Janet B. "Canine Rehabilitation: An Inside Look at a Fast-Growing Market Segment." *DVM: The Newsmagazine of Veterinary Medicine* 40.7 (2009): 14S–15S. Print.
- Verdon, Daniel R. "An Animal Planet." *DVM: The Newsmagazine of Veterinary Medicine* 36.7 (2005): 24–28. Print.

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PROGRESS REPORTS

When a soliciting organization requests a proposal, it often states that a specific number of progress reports will be required, particularly if the project covers a long time period. As their name suggests, progress reports, sometimes known as "status reports," tell readers how work is progressing on a project. Their immediate purpose is to inform the authorizing person of the activities completed on a project, but their long-range purpose should show the proposing organization's or the individual's competence in pursuing a task and completing it.

Status reports may also be prepared in paper format and submitted to supervisors. These progress reports help you or your work group provide evidence or documentation of your activities. They generally have three goals:

- To explain to the reader what has been accomplished and by whom, the status of the work performed, and problems that may have arisen that need attention
- To explain to your client how time and money have been spent, what work remains to be done, and how any problems encountered are being handled
- To enable the organization or individual doing the work to assess the work and plan future work

Structure of progress reports. Any work project, such as transportation or construction projects, requires regular progress reports. While these differ, they incorporate the same basic segments: goal of the project, work accomplished (for a given period), work remaining/planned (for the next period), problems encountered, and financial expenditures.

Structure by work performed. This is the standard structure for progress reports.

Beginning

- Introduction/project description
- Summary

Middle

- | | | |
|------------------|----|----------------|
| • Work completed | or | • Task 1 |
| Task 1 | | Work completed |
| Task 2, etc. | | Work remaining |
| • Work remaining | | • Task 2 |
| Task 3 | | Work completed |
| Task 4 | | Work remaining |
| • Cost | | • Cost |

End

- Overall appraisal of progress to date
- Conclusion and recommendations

In this general plan, you emphasize what has been done and what remains to be done and supply enough of an introduction to be sure that the reader knows what project is being discussed.

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For progress reports that cover more than one period, the basic design can be expanded as follows:

Beginning

- Introduction
- Project description
- Summary of work to date
- Summary of work in this period

Middle

- Work accomplished by tasks (this period)
- Work remaining on specific tasks
- Work planned for the next reporting period
- Work planned for periods thereafter
- Cost to date
- Cost in this period

End

- Overall appraisal of work to date
- Conclusions and recommendations concerning problems

Structure by chronological order. If your project or research is broken into time periods, your progress report can be structured to emphasize the periods.

Beginning

- Introduction/project description
- Summary of work completed

Middle

- Work completed
 - Period 1 (beginning and ending dates)
 - Description
 - Cost
 - Period 2 (beginning and ending dates)
 - Description
 - Cost
- Work remaining
 - Period 3 (or remaining periods)
 - Description of work to be done
 - Expected cost

End

- Evaluation of work in this period
- Conclusions and recommendations

Structure by main project goals. Many research projects are pursued by grouping specific tasks into major groups. Then the writer describes progress according to work done in each major group and perhaps the amount of time spent on that group of tasks. Alternatively, a researcher may decide to present a project by research goals—what will be accomplished during the project. Thus, progress

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reports will explain activities performed to achieve those goals. In the middle of the following plan, the left-hand column is organized by work completed and remaining and the right-hand column, by goals.

Beginning

- Introduction/project description
- Summary of progress to date

Middle

- | | | |
|------------------|----|----------------|
| • Work completed | or | • Goal 1 |
| Goal 1 | | Work completed |
| Goal 2 | | Work remaining |
| Goal 3, etc. | | Cost |
| • Work remaining | | • Goal 2 |
| Goal 1 | | Work completed |
| Goal 2 | | Work remaining |
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End

- Evaluation of work to date
- Conclusions and recommendations

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Case 9-3

Recipients of research funds from the preveterinary honor society are expected to submit a progress report. Sarah submits her report several weeks before the research reports will be completed and submitted. Note the detail of her progress, which suggests that her work follows the research methods she included in her proposal.

CASE DOCUMENT 9-3

TO: Dr. Elizabeth Tebeaux **DATE:** 4/6/14
FROM: Sarah Irving
SUBJECT: Progress on Semester Project

Summary

- Animal rehabilitation is a developing field many veterinarians do not utilize and many pet owners do not know is available. My objective is to create a report that will explain to veterinarians, preveterinary students, and veterinary students where the field of animal rehabilitation is now and how animal rehabilitation will affect the future of veterinary medicine.
 - I have narrowed the focus of my report to be a report for students interested in veterinary medicine, veterinary students, and veterinarians. My original audience also included pet owners. I believe these changes will enhance the readability and clarity of my report by preventing the report from being cluttered with information the primary readers would not find useful. I will format the report for pet owners to be able to find information that interests them, while focusing on the audience most in need of this information.
- My report will address the following issues:
 - Definition and description of animal rehabilitation
 - Unresolved issues in the field of animal rehabilitation
 - Future of animal rehabilitation
 - Rationale for including animal rehabilitation in veterinary practice
- I have read and taken notes on 11 articles that have information that I can use for my paper. I have four more articles with good information

to reread and take notes on. I have also e-mailed a survey to 50 veterinarians, veterinary technicians, and physical therapists who practice animal rehabilitation. I have received 13 responses to my survey. I must read the responses and make a citation for each response. I also must send individual thank you notes to the respondents. The sources I have used and am planning to use are listed below.

- I have made good progress on drafting my report. The articles and surveys left to read will fill the gaps in information in my rough draft. I have also reorganized my report outline. The changes to the outline will enhance the logical flow of the report by grouping similar information. The updated outline can be found on page 4 of this progress report.

Research Consulted:

Articles:

1. Why Give Pain Medication—Patient Care, Image or Profit?

- a. **Citation:** Brockett, John E. "Why Give Pain Medication—Patient Care, Image or Profit?" *DVM: The Newsmagazine of Veterinary Medicine* 39.2 (2008): 41. Print.

2. Putting the New Pain Management Guidelines into Practice

- a. **Citation:** Downing, Robin. "Putting the New Pain Management Guidelines into Practice." *Veterinary Medicine* 102.11 (2007): 704–5. Print.

3. Life with a Disabled Pet

- a. **Citation:** Foley, Denise. "Life with a Disabled Pet." *Prevention* 58.2 (2006): 198–201. Print.

4. Underwater Treadmill Therapy in Veterinary Practice

- a. **Citation:** Jurek, Christine, and Laurie McCauley. "Underwater Treadmill Therapy in Veterinary Practice." *Veterinary Medicine* 104.4 (2009): 182–90. Print.

5. Pet Rehab Becoming Mainstream Practice

- a. **Citation:** Nolen, R. S. "Pet Rehab Becoming Mainstream Practice." *Journal of the American Veterinary Medical Association* 235.7 (2009): 798–9. Print.

6. Canine and Equine Physical Therapy

- a. **Citation:** Payne, Richard M. "Canine and Equine Physiotherapy." *Veterinary Record: Journal of the British Veterinary Association* 165.4 (2009): 122. Print.

continued

7. Rehab Gives Animals Swifter Road to Recovery, DVM Says

- a. **Citation:** Skernitvitz, Stephanie. "Rehab Gives Animals Swifter Road to Recovery, DVM Says." *DVM: The Newsmagazine of Veterinary Medicine* 39.10 (2008): 1s-12s. Print.

8. Petting with a Purpose

- a. **Citation:** Smith, Sarah D. "Petting with a Purpose." *Natural Health* 36.3 (2006): 99-100. Print.

9. Postsurgical Pain Management: Take a Pre-Emptive Approach

- a. **Citation:** Stein, Robert M., and Stephanie Ortel. "Postsurgical Pain Management: Take a Pre-Emptive Approach." *DVM: The Newsmagazine of Veterinary Medicine* 39.7 (2008): 44-6. Print.

10. Canine Rehabilitation: An Inside Look at a Fast-Growing Market Segment

- a. **Citation:** van Dyke, Janet B. "Canine Rehabilitation: An Inside Look at a Fast-Growing Market Segment." *DVM: The Newsmagazine of Veterinary Medicine* 40.7 (2009): 14S-5S. Print.

11. An Animal Planet

- a. **Citation:** Verdon, Daniel R. "An Animal Planet." *DVM: The Newsmagazine of Veterinary Medicine* 36.7 (2005): 24-8. Print.

Survey

- I e-mailed 50 surveys to veterinarians, veterinary technicians, and physical therapists. The e-mail addresses were found on the University of Tennessee Certificate in Canine Rehabilitation website using the "Find a Practitioner" option. As this is one of the two certificate programs in the United States, I felt it would provide a good example of the opinions of certified animal rehabilitation practitioners on the field of animal rehabilitation. I received 13 responses. Five responses were from veterinarians, seven were from veterinary technicians, and one was from a physical therapist.
 - The surveys I sent to veterinarians contained the following questions:
 1. How would you describe the public perception of animal rehabilitation?
 2. What is the perception of other veterinarians you know about animal rehabilitation?
 3. What kinds of treatment do you offer?
 4. What is your most common procedure?
 5. What would you like to tell veterinary students considering rehabilitation practices?

- I modified the first and second questions for the surveys I sent to veterinary technicians and physical therapists:
 1. What is the public's perception of animal rehabilitation?
 2. What is the perception of veterinarians about animal rehabilitation?

Work Remaining

Articles to Read

1. Fake Fins, Plastic Paws

- a. **Citation:** Sayre, Carolyn, and Robert Horn. "Fake Fins, Plastic Paws." *Time* 170.10 (2007): 49-51. Print.

2. Changing Times

- a. **Citation:** Shearer, Tami. "Changing Times." *DVM: The Newsmagazine of Veterinary Medicine* 39.3 (2008): 34-. Print.

3. State Board Lacks Consistency on Standard of Practice

- a. **Citation:** Marshak, Doug. "State Board Lacks Consistency on Standard of Practice." *DVM: The Newsmagazine of Veterinary Medicine* 38.11 (2007): 38-40. Print.

4. The Price of Pain

- a. **Citation:** Fiala, Jennifer. "The Price of Pain." *DVM: The Newsmagazine of Veterinary Medicine* 38.10 (2007): 30-2. Print.

Survey

- The 13 survey responses must also be read, and I must make the citations for the surveys. I also must draft individual thank you notes to each respondent, as some respondents asked questions at the end of their survey responses. These thank you notes will be sent the week of April 5, 2014.

Changes to the Initial Proposal

- I have narrowed the focus of my report to be a report for students interested in veterinary medicine, veterinary students, and veterinarians. My original audience also included pet owners. This change reflects the fact that many sections of my report would not interest most pet owners. Though I have narrowed my audience, it is possible that pet owners could also be a part of my audience, and the report will be formatted for pet owners to be able to find useful information.

continued

- I have added a section defining animal rehabilitation at the beginning of the report and sections that are required in the major report template. I have also reorganized the report by moving subsections into the section "What Is Animal Rehabilitation." These sections include owner involvement in the rehabilitation process, what certification programs exist, and organizations formed to promote animal rehabilitation. These subsections were moved from the "Unresolved Issues in the Field of Animal Rehabilitation" section after reading sources that suggested the debate on these issues has been largely completed.
- To describe the field of animal rehabilitation more accurately I have changed the section on prosthetics to a section on assistive devices. This change reflects the realization that most veterinarians consider rehabilitation to be work done postsurgically and with minimal invasiveness. I believe these changes will enhance the readability and clarity of my report.

Updated Outline

Letter of transmittal

Title page with descriptive abstract

Table of contents

Summary

Introduction

What is animal rehabilitation

- a. Definition of animal rehabilitation
- b. History of animal rehabilitation
- c. Types of animal rehabilitation
 - i. Physical therapy
 - ii. Hydrotherapy
 1. Benefits of hydrotherapy
 2. What to consider before choosing hydrotherapy
 - iii. Assistive devices
- d. The developing demand for animal rehabilitation
- e. Owner involvement in the rehabilitation process
- f. What certification programs exist?
 - i. Canine Rehabilitation Institute
 - ii. University of Tennessee College of Veterinary Medicine Certificate Program in Canine Rehabilitation
- g. Organizations formed to promote animal rehabilitation
 - i. Institute of Registered Veterinary and Animal Physiotherapists

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Unresolved issues in the field of animal rehabilitation

- h. The animal pain management debate
 - i. Who is qualified to practice animal rehabilitation
 - i. The American Veterinary Medical Association position
 - ii. The American Physical Therapy Association position
 - iii. State government actions to date

Where animal rehabilitation is headed

- j. Recent developments in the field
- k. Establishment of a specialty
 - l. Animal plastic surgery
- m. Greater public awareness

Why practice animal rehabilitation

- n. Good for business, good veterinary practice, good for the clinic's reputation
- o. Advice for preveterinary students considering a future as an animal rehabilitation practitioner

Conclusions: Is animal rehabilitation the future of veterinary medicine?

Bibliography

Appendix A: Proposal

Appendix B: Progress Report

Working Bibliography

- Brockett, John E. "Why Give Pain Medication—Patient Care, Image Or Profit?" *DVM: The Newsmagazine of Veterinary Medicine* 39.2 (2008): 41. Print.
- Downing, Robin. "Putting the New Pain Management Guidelines into Practice." *Veterinary Medicine* 102.11 (2007): 704–705. Print.
- Fiala, Jennifer. "The Price of Pain." *DVM: The Newsmagazine of Veterinary Medicine* 38.10 (2007): 30–32. Print.
- Foley, Denise. "Life with a Disabled Pet." *Prevention* 58.2 (2006): 198–201. Print.
- Jurek, Christine, and Laurie McCauley. "Underwater Treadmill Therapy in Veterinary Practice." *Veterinary Medicine* 104.4 (2009): 182–190. Print.
- Marshak, Doug. "State Board Lacks Consistency on Standard of Practice." *DVM: The Newsmagazine of Veterinary Medicine* 38.11 (2007): 38–40. Print.
- Nolen, R. S. "Pet Rehab Becoming Mainstream Practice." *Journal of the American Veterinary Medical Association* 235.7 (2009): 798–799. Print.

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- Payne, Richard M. "Canine and Equine Physiotherapy." *Veterinary Record: Journal of the British Veterinary Association* 165.4 (2009): 122. Print.
- Sayre, Carolyn, and Robert Horn. "Fake Fins, Plastic Paws." *Time* 170.10 (2007): 49-51. Print.
- Shearer, Tami. "Changing Times." *DVM: The Newsmagazine of Veterinary Medicine* 39.3 (2008): 34. Print.
- Skernitvitz, Stephanie. "Rehab Gives Animals Swifter Road to Recovery, DVM Says." *DVM: The Newsmagazine of Veterinary Medicine* 39.10 (2008): 1s-12s. Print.
- Smith, Sarah D. "Petting with a Purpose." *Natural Health* 36.3 (2006): 99-100. Print.
- Stein, Robert M., and Stephanie Ortel. "Postsurgical Pain Management: Take a Pre-Emptive Approach." *DVM: The Newsmagazine of Veterinary Medicine* 39.7 (2008): 44-46. Print.
- van Dyke, Janet B. "Canine Rehabilitation: An Inside Look at a Fast-Growing Market Segment." *DVM: The Newsmagazine of Veterinary Medicine* 40.7 (2009): 14S-15S. Print.
- Verdon, Daniel R. "An Animal Planet." *DVM: The Newsmagazine of Veterinary Medicine* 36.7 (2005): 24-28. Print.

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Case 9-4

In research, progress reports are part of doing business. And progress reports take numerous forms. Ohio State University provides its general research reports online (see Figure 9-3). Readers can click on a date, from July 2011 to October 2013, listed in the left-hand menu. The research done during that month appears, and readers can read as many summary monthly reports as they choose. This is a good example of an interactive online report. However, reports to funding agencies will follow the standard progress report guidelines. Again, the form of progress reports, like any reports, depends on audience and purpose.

In business, progress reports are standard. COSMIX (Colorado State Metro Interstate Expansion) posts general progress reports on road projects on the Internet so that the public can track progress through text and pictures that can be seen by clicking through each project. This type of online interactive progress report provides transparency and allows the public to see how COSMIX spends highway expansion dollars. Despite the new emphasis on media-based

continued

The screenshot displays the 'Office of Research' website for The Ohio State University College of Medicine. The page features a navigation bar with links: About, Funding and Grants, Research Operations, Clinical Research, Compliance, Technology Transfer & Commercialization, Quarterly Publications, Research Seminars and Events, and Social. Below the navigation bar, there is a search bar and a link to 'SCHOOL OF HEALTH AND REHABILITATION SCIENCES'. The main content area is titled 'Research News' and includes two news items: 'Policy updates from Institutional Animal Care and Use Committee' and 'Certificate program in Comparative Effectiveness Research available'. On the left side, there is an 'Archives' section with a list of dates from July 2011 to October 2013, each followed by a number in parentheses indicating the number of reports for that month. At the bottom, there is a 'Categories' section.

FIGURE 9-3 Interactive Progress Report

Source: <http://medicine.osu.edu/research/news/archive/2013/05.aspx>

progress reports, the progress report standards remain: what you have done, tasks that remain, evaluation of work.

Online progress reports that combine text and photos that work interactively provide visual perspective on how the project is being pursued. Readers can toggle between segments of a project and see a slideshow of the project as it develops. See Figure 9-4. Figure 9-5 exemplifies another method of reporting progress, a pdf of a general COSMIX progress report also available online. Nevertheless, when you write progress reports for grants or projects, you will need to provide a detailed project report to the entity that approved the project, its funding, and its timeline.

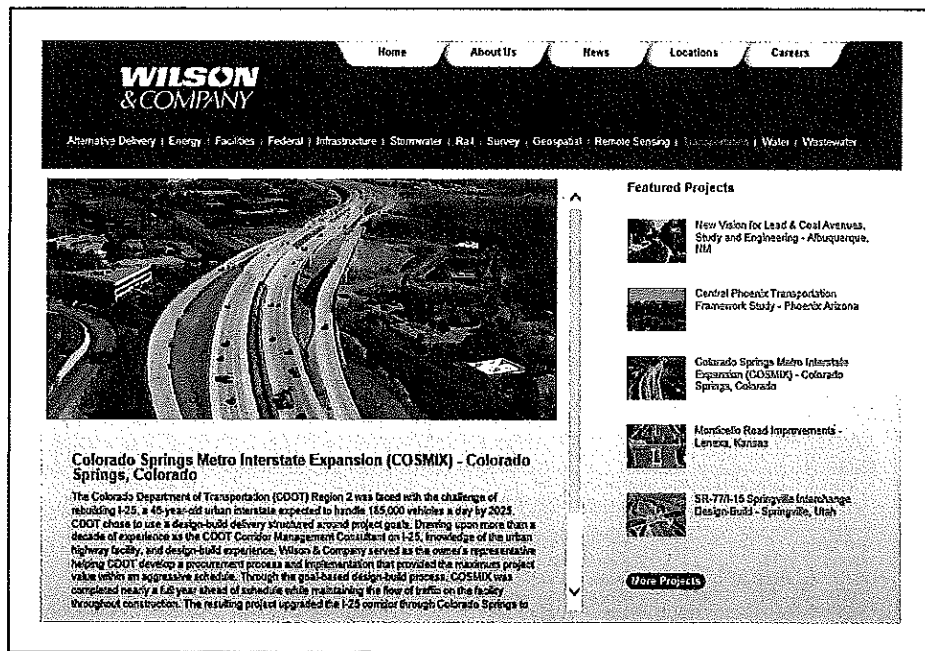


FIGURE 9-4 Interactive Progress Report

Source: <http://www.wilsonco.com/projects/transportation/cosmix>



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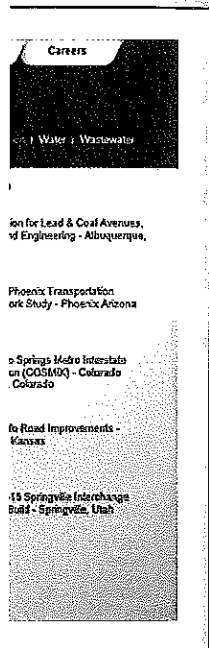
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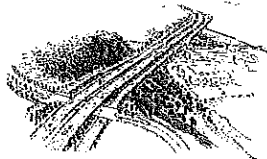
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CH2MHILL



Design-Build

Client
Colorado Department of
Transportation

Location
Colorado Springs, CO, USA

Colorado Springs Metro Interstate Expansion (COSMIX™)

Rockrimmon Constructors, a CH2M HILL and SEMA Construction joint venture, won this design-build contract in January 2005. The project extends and expands Colorado Springs' highway capacity from Bijou Street to the North Academy Boulevard interchange by widening I-25 to six through-lanes, while accommodating the future expansion to eight lanes. The \$129 million scope includes 18 new bridges, two culverts, and numerous retaining walls. Other agency costs, including right-of-way acquisition, bring the total value of the project to \$150 million.

Segment 1: Bijou Street Interchange

The Bijou Street Interchange (Segment 1), located at the southern portion of the project, will be the last phase of work performed. This complex reconstruction of a 40-year old interchange and 70-year old bridge over Monument Creek will also reduce I-25 curvature and provide a new mainline crossing over Colorado Avenue, and improved storm drainage. The new Bijou Bridge will improve downtown access with two additional lanes and be expandable for two more in the future.

A gravity storm water outfall to Monument Creek for I-25 runoff will be provided under Bijou Street to reduce the flooding currently experienced on I-25 during major storm events.

Heavily traveled and often congested, this elderly "gateway to downtown" will be closed for construction. Our plans to detour traffic from this busy access point include providing shuttle bus services to transport pedestrians and bicyclists across the highway while normal routes are closed. Construction and traffic-related noise at the nearby Monument Valley Park duck ponds, horticultural gardens and baseball fields will be mitigated with sound walls and earthen berms. These features will help preserve the quiet environment and character of this urban open space.

Segment 2: I-25 Expansion at Fillmore to Garden of the Gods Road

The Fillmore segment will widen I-25 from two lanes to three in each direction, widen the median, provide an asphalt overlay south of Garden of the Gods, widen the Ellston Street bridges, and widen and replace the I-25 pavement north of Garden of the Gods to Garden of the Gods Road. The Garden of the Gods Road north ramps will be rebuilt.

Segment 3: Nevada/Rockrimmon Interchange

The interchange will reconfigure the existing southbound left exit ramp to the right side, dramatically improving driver expectations while other additions improve cross traffic flow between neighborhoods on both sides of I-25. A newly configured split-diamond interchange will tie Nevada to Rockrimmon together and add collector-distributor (C D) roads between the two interchanges. Corporate Drive will link into Nevada Avenue, and the

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COSMIX.JPG
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continued

FIGURE 9-5 PDF Progress Report

Source: www.ch2m.com/corporate/markets/transportation/assets/.../COSMIX.pdf



business arterials of Mark Dabbling and Corporate Drive will gain improved connectivity with several new means of access.

Ramps will be closed during this construction, which will connect with the recent roadway improvements associated with the south end of the Woodmen Road interchange project.

Segment 4: I-25 from Woodmen to North Academy

This segment adds a third lane to I-25 in each direction, widens concrete in the median from Cottonwood Creek to Pine Creek, and widens asphalt on the outside of the existing roadway pavement and asphalt overlay from Pine Creek to the North Academy Interchange. We will maintain two lanes of traffic in each direction to minimize delays and traffic flow disruptions.

The Finished Product

As the project tasks are completed and segments connected, the miles between Bijou and the North Academy Interchange will provide a seamless network of roadway specifically designed to keep pace with Colorado Springs's continued growth.

Beginning in the summer of 2005, our team's sequenced construction approach accelerates the work dramatically during the life of the project. We expect to complete the COSMIX™ tasks by winter of 2007, one year earlier than required by CDOT.

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FIGURE 9-5 *continued*

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STYLE AND TONE OF PROPOSALS AND PROGRESS REPORTS

The proposal and its related report documents serve as sales documents, but writers have an ethical commitment to present information about a project in a clear and accurate manner. Proposals, once accepted, become legally binding documents. Because contracts emerge from proposals, organizations must be prepared to stand behind their proposals. Thus, the style should be authoritative, vigorous, and positive, suggesting the competence of the proposer. Generalizations must be bolstered by detailed factual accomplishments. Problems should be discussed honestly, but positive solutions to problems should be stressed. Neither the proposal nor the progress report should resort to vague, obfuscatory language.

CHECKLIST FOR DEVELOPING PROPOSALS AND PROGRESS REPORTS

Proposals

Planning

- ☐ Have you made a list of all requirements given in the RFP?
- ☐ Who are your readers? Do they have technical competence in the field of the proposal? Is it a mixed audience—some technically educated, some not? To whom could the proposal be distributed?
- ☐ What problem is the proposed work designed to remedy? What is the immediate background and history of the problem? Why does the problem need to be solved?
- ☐ What is your proposed solution to the problem? What benefits will come from the solution? Is the solution feasible (both practical and applicable)?
- ☐ How will you carry out the work proposed? Scope? Methods to be used? Task breakdown? Time and work schedule?
- ☐ Do you want to make statements concerning the likelihood of success or failure and the products of the project? Who else has tried this solution? What was their success?
- ☐ What facilities and equipment will you need to carry out the project?
- ☐ Who will do the work? What are their qualifications for doing the work? Can you obtain references for past work accomplished?
- ☐ How much will the work cost (e.g., materials, labor, test equipment, travel, administrative expenses, and fees)? Who will pay for what? What will be the return on the investment?

continued

CHECKLIST FOR DEVELOPING PROPOSALS AND PROGRESS REPORTS


continued

- ☐ Will you need to include an appendix? Consider including biographical sketches, descriptions of earlier projects, and employment practices.
- ☐ Will the proposal be better presented in a report format or in a letter or memo format?

Revising

- ☐ Does your proposal have a well-planned design and layout? Does its appearance suggest the high quality of the work you propose to do? Do your readings both promote and inform?
- ☐ Does the project summary succinctly state the objectives and plan of the proposed work? Does it show how the proposed work is relevant to the readers' interest?
- ☐ Does the introduction make the subject and the purpose of the work clear? Does it briefly point out the importance of the proposed work?
- ☐ Have you defined the problem thoroughly?
- ☐ Is your solution well described? Have you made its benefits and feasibility clear?
- ☐ Will your readers be able to follow your plan of work easily? Have you protected yourself by making clear what you will do and what you will not do? Have you been careful not to promise more results than you can deliver?
- ☐ Have you carefully considered all the facilities and equipment you will need?
- ☐ Have you presented the qualifications of project personnel in an attractive but honest way? Have you asked permission from everyone you plan to use as a reference?
- ☐ Is your budget realistic? Will it be easy for the readers to follow and understand?
- ☐ Do all the items in the appendix lend credibility to the proposal?
- ☐ Have you included a few sentences that urge readers to accept the proposal?
- ☐ Have you satisfied the needs of your readers? Will they be able to comprehend your proposal? Do they have all the information they need to make a decision?

CHECKLIST FOR DEVELOPING PROGRESS REPORTS

Progress

Planning

- ☐ Do you have a clear purpose for the proposal?
- ☐ Do you have a clear sequence of steps to follow?
- ☐ What is the scope of the project?
- ☐ Are there any potential problems?
- ☐ Can you get the necessary resources?
- ☐ Is your work plan realistic?
- ☐ Are costs within budget?
- ☐ Do you have a timeline?

Revising

- ☐ Does your report clearly state the purpose of the project?
- ☐ Does the report show the progress of the project?
- ☐ Are the advantages of the project clearly stated?
- ☐ Is your timeline realistic?
- ☐ Have you included all the necessary information?
- ☐ Does your report show the results of the project?
- ☐ Do you have a clear conclusion?
- ☐ Can you make any recommendations for future work?



continued

**CHECKLIST FOR DEVELOPING
PROPOSALS AND PROGRESS REPORTS**

continued

Progress Reports**Planning**

- ☐ Do you have a clear description of your project available, perhaps in your proposal?
- ☐ Do you have all the project tasks clearly defined? Do all the tasks run in sequence, or do some run concurrently? In general, are the tasks going well or badly?
- ☐ What items need to be highlighted in your summary and appraisal?
- ☐ Are there any problems to be discussed?
- ☐ Can you suggest solutions for the problems?
- ☐ Is your work ahead of schedule, right on schedule, or behind schedule?
- ☐ Are costs running as expected?
- ☐ Do you have some unexpected good news you can report?

Revising

- ☐ Does your report have an attractive appearance?
- ☐ Does the plan you have chosen show off your progress to its best advantage?
- ☐ Is your tone authoritative, with an accent on the positive?
- ☐ Have you supported your generalizations with facts?
- ☐ Does your approach seem fresh or tired?
- ☐ Do you have a good balance between work accomplished and work to be done?
- ☐ Can your summary and appraisal stand alone? Would they satisfy an executive reader?

EXERCISES

1. Your friend and colleague, Lydia Sasaki, has composed the following brief proposal and asks you to review it. What specific changes would you advise she make so that the proposal is as clear and persuasive as possible?

To: Chief William Ricco
 From: Officer Lydia Sasaki
 Subject: Surveillance Convention
 Date: August 11, 2014

I have received a letter of invitation from the Association of Certified Surveillance Professionals in reference to a convention being held by the association June 8–11, 2015, in Albuquerque. This convention will offer a comprehensive training program designed to thoroughly train police officers in all aspects of acoustic gunfire detection systems. Instructors at the convention consist of surveillance and security specialists from all over the world and the United States.

I am respectfully requesting travel funds to attend the convention in order to represent our department. There are workshops at the convention that deal with the establishment of gunfire detection systems by police departments. There are also two preconvention courses that are being conducted specifically on acoustic surveillance. These are the AS Certification Course and the AS Maintenance Course, both on June 7. The remaining workshops and training sessions will be held June 8–11. The workshops include:

Equipment Selection	Urban Obstacles
Sensor Placement	Acoustic Gun Signatures
Legal Issues	Triangulation and Multilateration
Service and Maintenance	Acoustic-Based Patrolling
Community Relations	Video Surveillance Interaction
Critical Incident Evaluation	Incident Archiving

As soon as we have the ability to acquire a gunfire detection system, it will be necessary for the department to obtain all of the facts regarding acoustic surveillance and to examine what other departments have done to implement and operate their systems. Attached to this memo is a copy of the letter I received from ACSP. In this letter are the details for registration, travel, and accommodations for individuals attending the convention.

If you have any questions regarding the convention, please feel free to contact me at any time.

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2. Visit www.grants.gov, locate a request for proposals for a project related to your major, and answer the following questions:

- According to the RFP, what is the product or service the agency wants provided? Or what work does it want performed? Or what problem does it want solved?
- Does the RFP specify the categories of information the proposal must include? If so, what are those categories? If not, what would be appropriate categories?
- Does the RFP specify a minimum or maximum length for the proposal? If so, what is that length? If not, what length would you estimate as necessary?
- Does the RFP specify the organization of information? If so, what is that organization? If not, what would be an appropriate organization?
- Does the RFP specify the format for the proposal? If so, what is that format? If not, what format would you consider appropriate?
- Does the RFP identify the criteria by which proposals will be evaluated? If so, what are those criteria? If not, what are likely criteria? How might these criteria guide the writing, organization, and formatting of the proposal?

Write a memo summarizing your findings to distribute to the students in your class.