



Grant Writers' Seminars and Workshops

THE GRANT APPLICATION
WRITER'S WORKBOOK

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Successful Proposals to Any Agency

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OVERVIEW PART TWO

PREPARING THE OVERVIEW/EXECUTIVE SUMMARY AND SIGNIFICANCE SECTIONS

Once you have completed all the activities that are summarized in Part One, you will be in a good position to start assembling your ideas into a workable plan for the development of the actual grant application itself. The process should begin by developing the all-important Overview/Executive Summary and Significance sections of your grant application, which provide the blueprint for the detailed development of your plan of work and address in detail the importance of the project to the mission of the funding agency. In Part Two we will spend considerable effort to develop these two important components of the application.

CHAPTER 7 addresses the conceptual issues that are involved in formulating the Overview/ Executive Summary and outlines the specific purpose of the 12 key components of this document.

CHAPTER 8 takes you step-by-step through the process of the actual development of a first draft. This will involve a series of steps that begin with creating a bulleted outline; expanding to the development of sentences and paragraphs; and ultimately integrating this into a cohesive, logical presentation of your ideas.

CHAPTER 9 provides you with two well-written examples of Overview/Executive Summary sections of proposals to different funding agencies that you can use to develop your own proposal.

CHAPTER 10 focuses upon the development of a Significance paragraph, arguably the most important paragraph in the entire grant application. Once again, this chapter will take you step-by-step through the process of creating this paragraph.

One of the most important elements that will be essential to your success in these endeavors will be your ability to see and obtain critical feedback from your colleagues concerning the first (and probably second and third) draft of what you have written. You must have a well-developed idea as well as all the conceptually sound components of your application in place and peer reviewed before engaging in the time-consuming effort of writing the complete grant application.

CHAPTER 7

THE OVERVIEW/EXECUTIVE SUMMARY

In this chapter we will begin a discussion of the Overview/Executive Summary of your grant application. At the very outset, we need to emphasize to you, the potential applicant, that the preparation of this section is the key to writing a truly first-class application. If this section is effectively developed, the rest of the application will fall naturally into place. You should therefore spend considerable time to get it exactly right. To help you understand how to write this section effectively, we will focus on development of the conceptual framework for an effective Overview/Executive Summary. In CHAPTER 8 we will actually take you step-by-step through the development of this section of your grant application. Remember that this may be the very first part of your proposal that reviewers will read as they begin reviewing and evaluating the relative merits of your ideas and their relevance to the mission of the funding agency. It must therefore very quickly engender enthusiasm and advocacy for your ideas.

Anyone who reads your proposal must be able to easily and quickly read and understand the Overview/Executive Summary section. The flow of logic must be unassailable and absolutely compelling. As we pointed out in CHAPTER 4, there is never an *a priori* guarantee that a reviewer will necessarily be knowledgeable in the area or field of your proposal, so it is essential that you write this document in such a way that any intelligent reader will understand it. The Overview/Executive Summary must bring the reviewers to a position of advocacy for your proposal without their knowing that they have been led. As such, this part of the grant application is probably the most difficult to write well.

This section of the application is likely to be called by different names, depending upon the specific funding agency to which you will be applying for grant support. Because most granting agencies have different formats for preparation of an application, it would be impossible to identify exactly what each funding agency would require. Nevertheless, many funding agencies specifically provide for the presentation of an Overview/Executive Summary. For example, in a proposal to the National Institutes of Health, this section would be called the Specific Aims page. If this were a proposal to the National Science Foundation, this section would be the first part of the Project Description. For U.S. Department of Agriculture grant proposals, this would be the first part of the Introduction of your application, plus a specific section on Rationale and Significance. For U.S. Department of Defense (DARPA) proposals, this section is actually termed the Executive Summary. For foundations, this will often be the pre-proposal that is submitted to explore the potential interest of a foundation and from which an invitation to submit a full proposal will be based. In the event that the proposal format of the funding agency from which you are seeking support does not specifically provide for an Overview/Executive Summary, use the opening section of the Projected Approach/ Plan of Work as a place to insert this section (unless there is a precise format for presentation of the information requested that does not allow for this degree of flexibility).

The Overview/Executive Summary is important because it will be the first part of your grant proposal that the reviewers will read. Individuals who study reading behavior often suggest

that if a reader is not excited by what he or she reads in the opening sentence, then he or she is less likely to read the first paragraph. If the reader is not excited by what he or she reads in the opening paragraph, then he or she is less likely to read the first page. If the reader is not excited by what he or she reads on the first page, then he or she is not likely to read the remainder of the material. The opening sentence, paragraph, and page are absolutely critical to your success as a grant writer, because *it is highly likely that, by the time the reviewers have finished reading this one- to one and one-half-page document, they will have made an executive decision about whether or not this is an interesting or novel idea, as well as whether this is a proposal that will be enjoyable or painful to read.*

Obviously, having the reviewers reach the former conclusion is infinitely preferable to having them reach the latter conclusion. But for this to happen, the reviewers must be capable of grasping all the essential elements that make any grant proposal successful — the significance, the approach or plan of work, the qualifications of the applicant and his or her co-applicants, the appropriateness of the environment and the applicant's institution, and some evidence that there will be something to distinguish this proposal from all others (novelty and innovation). To assemble all this information in a relatively short document is not easy. Indeed, we are convinced that it is among the single most difficult challenge facing grant applicants.

Because the Overview/Executive Summary will summarize *everything* that is truly important about your grant proposal, it can and will serve as the blueprint or master plan of your entire proposal. It is essential that you write this part of the grant application *first*. (The Overview/Executive Summary should therefore be distinguished from the relatively abbreviated Abstract, a separate part of almost all grant applications that should be written *last*.) One of the most important reasons for writing your Overview/Executive Summary first, in addition to its value as serving as the master plan of your proposal, is that it forces you to think very critically about how all the various pieces of your grant application fit together. Furthermore, as we pointed out in CHAPTER 2, letting your colleagues read this document early on in the writing process will allow you to receive critical, much-needed feedback from your colleagues regarding the relative merits of your idea. Gaining this critical feedback can be invaluable in helping you refine your ideas as well as avoid potential pitfalls that might derail you at a later point when you are already immersed in writing the body of your grant application.

TIP: Linkage of individual components within the Overview/Executive Summary section and elimination of extraneous detail are key to leading your reviewers to a position of advocacy.

Because of the critical importance of your Overview/Executive Summary, we are going to spend a great deal of time helping you prepare to write this section of your grant application. As we will describe in detail below, the development of this section should consist of four major sections, or paragraphs, that each have a precise, well-defined purpose. Embodied within those four major sections will be no fewer than 12 major elements, each of which must be carefully thought about for its relevance and contribution to the whole with respect to the Overview/Executive Summary and its relationship to the other components.

Simply put, each of the 12 components that we recommend as elements of the Overview/Executive Summary has to be linked logically to what comes before and after it. If, for any reason, a reviewer has to stop and think about how one element relates to another, you have potentially disrupted his or her line of concentration and made it unnecessarily difficult for that reviewer to grasp exactly what you are trying to convey. Most writers of grant applications,

unfortunately, fail to develop such linkage — such cohesion — when they write their Overview/Executive Summary.

Another serious mistake that many grant writers make is to include too much unnecessary specific detail in the Overview/Executive Summary. Keep in mind that the overall objective of this section is to primarily project your proposal's conceptual (i.e., the most exciting) aspects. You would probably agree that the specific details are usually not the most exciting part of the project. Therefore, their inclusion in the Overview/Executive Summary would usually detract from the conceptually exciting elements of your proposal. Reserving a discussion of the detailed information for the main body, where details of whatever you plan to do will appropriately be spelled out, will help ensure that reviewers are conceptually on board before requiring that they deal with all the details of your proposal. Literature citations are usually not needed in this section because they also detract from the readability of the Overview/Executive Summary — and you definitely want this section to be *maximally* readable. Note also that because every piece of information in the Overview/Executive Summary will be expanded upon elsewhere in the application, the opportunity for supporting citations can easily be provided at that time, thus obviating their need for inclusion in the Overview/Executive Summary.

Outlining all the major elements that you will need to include in this most important document is the key to writing a powerful Overview/Executive Summary section. This allows you to see more clearly how the various components relate to each other and to recognize and eliminate extraneous detail. This also allows you to see whether or not the logic and the concepts flow without the interfering clutter of unnecessary words. To outline effectively, you first need to fully understand what each of the 12 elements of the Overview/Executive Summary section is meant to accomplish and how each should be linked to the others. They are described below, organized into the four-paragraph 12-element format that we recommend for this section. Once we have reviewed with you in this chapter why each of these elements is important to your Overview/Executive Summary, the following chapter will assist you in the actual preparation of this section of your grant application.

Introductory Paragraph

1. Opening sentence(s). The opening sentence of the Overview/ Executive Summary is the very first sentence of the body of your grant proposal that reviewers will read; it must be a real “grabber.” We pointed out above that if the reader is not excited by your opening sentence, he or she will be less likely to want to read the opening paragraph. This sentence, therefore, should be written in such a way that it will immediately catch the attention of reviewers. It must provide sufficient information such that the reviewers will be able to understand what the proposal will be about. Furthermore, this sentence alone must convey why it should be possible for the reviewers to have a strong sense of why this project would be of potential interest to the funding agency targeted for this proposal. After your opening sentence, you might consider an amplifying sentence that would further emphasize some specific point or issue identified in this opening sentence. Great care and thought must go into the creation of the opening sentence.

2. Important knowns. The opening sentence, or sentences, should be followed by three or four sentences that are specifically designed to bring the reviewers up to speed with respect to important facts that will educate them as to specifically why this is an important topic or area. These few sentences are obviously not meant to be a comprehensive review; rather, the objective here is to distill the most important knowns of your field or area related to the proposal into just a few sentences. If you envision this as a funnel of information, the three or four sentences should very quickly bring the reviewers from the very general broad strokes of the state of the art in the

field (the “forest” that was established in the opening sentences) to the very heart of what your proposal will be specifically about (the “tree”). These should establish the current state of knowledge for all the reviewers, even those who are not closely aligned with your specific discipline. If you recall our discussion in CHAPTER 4, we pointed out that there is no *a priori* guarantee that reviewers will be knowledgeable in your field, or area, and you as the applicant have an obligation to educate them if you want them to understand why your project is important and should be supported. One caveat here is that it is almost always a bad idea to utilize the opening sentence to identify what your project is designed to deal with. In other words, introducing the reviewers to your project with a sentence that begins with something like “The purpose of this grant proposal is to _____” necessarily presupposes that all reviewers will have this knowledge and understand why your project is important. (We are not convinced of the validity of this assumption.) The overall goal of this section of your opening paragraph is that it should set the scene for presenting the gap in the knowledge base, a specific problem, or a critical need that you will plan to address in this grant proposal.

3. Establish the gap in the knowledge base or a critical need that must be addressed. Once you have educated the reviewers as to what is known in the field, you will need to introduce the issue that will basically serve as the centerpiece for your proposal — specifically, the gap in the knowledge base or a critical need. This sentence, or sentences, is among the most important that you will write in the application because, as you will see, it sets up everything downstream with respect to the flow of logic for the grant proposal. The establishment of a critical need (that will ultimately be addressed by the activities proposed in your proposal) serves as the driving force (or *raison d’etre*) for your proposal. This statement should be simple and direct. It should very specifically identify the gap in the knowledge base or a critical need that you will address with this proposal. This component needs to be linked to the knowns by being an obvious extension of them (i.e., the reviewers need to make the connection of filling this gap, solving the problem, or addressing the need). This next logical step in advancing the field or improving a situation needs to be relevant to the mission of the funding agency to which you alluded in your opening sentence. Finally, you must make readily apparent to the reviewers exactly why the gap in the knowledge base or the critical need that you have just identified is actually a major and significant problem.

If the reviewers do not understand why there is a problem or issue or realize there may be a problem or issue and but are unclear about its relevance or importance, then they will not be interested in reading your grant proposal. And we can assure you that a reviewer who is not interested in reading your grant will not be your advocate!

TIP: At the conclusion of this first paragraph, the reviewers should fully understand that there is a problem that critically needs to be addressed. They should also have a sufficient knowledge base to appreciate why there is a problem and should be sufficiently educated so that they can understand everything that will follow in this Overview/Executive Summary without having to learn additional new knowns.

Second: “What Is Going to be Done by Whom” Paragraph

4. Your long-term goal. A statement of your long-term goal is used to begin the second paragraph, the purpose of which is to convince the reviewers that you (and your colleagues) are highly qualified to address of the problem or issue that you identified in the opening paragraph. This statement defines the continuum of professional activities you are following (as a career goal) and the general field or area in which you either are already or are planning to become an

acknowledged expert. The time required to attain your long-term goal should span at least several grant proposals; it could even include your entire professional career goal. New (or newer) applicants should concentrate on one long-term goal, whereas established grant writers may, under some circumstances, have more than one without appearing to dilute their efforts. There should be clear linkage between this long-term goal and the key problem or need that you have delineated at the end of the first paragraph (i.e., the problem identified must be clearly encompassed within the continuum of professional activities that your long-term goal defines). There must also be a very close linkage between the statement of your long-term goal and the overall mission of the funding agency to which you will be requesting support. Once again, this underscores the importance of fully understanding what the mission of the funding agency is, an issue that we discussed in detail in CHAPTER 1. Your mission and the mission of the funding agency must be sufficiently similar that their investment in you will be a solid, long-term good investment. Be careful not to overstate your long-term goal.

5. Objective of this proposal. The statement of long-term goal should be followed directly by a specific statement of exactly what the objective for this proposal is. This is where you explain to the reviewers exactly what you expect to accomplish with *this* proposal (and *not*, as was pointed out above under the section on the opening sentence, to introduce the opening paragraph). Put quite simply, if you are paying careful attention to the issue of linkage that we have tried to stress to this point, the objective will normally be to fill the gap in the knowledge base, solve the problem, or address the need that you have carefully delineated at the end of the first paragraph. That is your objective, and you must make certain that a tight linkage exists between the two. There must also be linkage between the objective and your long-term goal. It must be clear that the objective is one step along the continuum of professional activities that are projected by your long-term (professional career) goal.

6. Hypothesis-driven or statement-of-need – driven proposals. Without exception, all grant proposals must be either hypothesis driven or statement-of-need driven. In either case, it is absolutely critical that a strong linkage exists between the central hypothesis or statement-of-need and the objective of the proposal. The actual decision of whether to write a proposal that is hypothesis driven or statement-of-need driven depends upon the nature of the problem that has been identified in the first paragraph and the activities that will be taken to address that problem. In most cases, to form a central hypothesis, a significant body of information must exist regarding the problem or issue, and a central hypothesis is used as a guide or working model that predicts an explanation as to a potential solution to that problem or issue.

The identification and formulation of a central hypothesis is the primary way in which grant proposals that deal with cases of scientific inquiry and laboratory bench research are approached. Usually in such cases, there is a well-established body of information that readily lends itself to the formation of a central hypothesis. In other cases, however, there may not be sufficient information available that would allow formulation of a hypothesis, or the formulation of that hypothesis would have to be contrived. Under those circumstances, the statement-of-need developed at the end of the opening paragraph alone would be a more appropriate approach. There are a number of circumstances in which the decision as to which approach to take is relatively obvious (i.e., there would clearly be no central hypothesis related to a request for funds to spend a sabbatical in Japan, remodel a theater, or purchase a major piece of scientific equipment.) There are, however, a few situations in which either approach might be justified, and under those circumstances a final decision can often be difficult.

Should you choose to develop your proposed solution to the problem identified in the opening paragraph as a hypothesis-driven project, remember that the central hypothesis must

logically flow from the objective of the proposal, because the objective is attained by objectively testing the central hypothesis. That is, the linkage between these two components must be obvious. Furthermore, make every effort possible to write a directional hypothesis. In other words, you want your central hypothesis to convey the idea that this is your best bet as to what explains the phenomenon that you will be investigating. This is the component that gives the all-important focus to your proposal. It must prevent reviewers from concluding that you intend to “splash around on a fishing expedition” until you find something. As noted above, your central hypothesis must be objectively testable, *not* something that is designed to *prove* a predetermined conclusion. Bias of the latter kind is, unfortunately, enough to undermine an entire proposal. After stating your central hypothesis, you must continue with a sentence that tells your reviewers exactly how you have formulated this central hypothesis — why you chose this starting point from among others as the best bet. Usually, hypotheses are formulated on the basis of the applicant’s preliminary results, coupled with what has already been established based upon the existing knowledge base.

Remember, when formulating a central hypothesis you are stating that you think that, among all the potential possibilities that would explain something, what you are proposing is the most likely. Intrinsic to a hypothesis, therefore, is that there must be at least two potential outcomes, and though one is more likely than another, there is at least a remote but nevertheless conceptually valid possibility that the alternative outcome could occur. If this would not be the case (i.e., in considering the two possible outcomes, no reasonable person would ever come to the conclusion that the alternative could occur in this lifetime), then the central hypothesis would become a truism (i.e., not testable). In such a case, the hypothesis would not be valid. It is always a good test, therefore, to consider what the two possible outcomes would be, and keep in mind that the alternative outcome is always possible, at least conceptually.

As pointed out above, and in contrast to a grant proposal that is hypothesis driven, a statement-of-need would be appropriate to drive grant proposals in which nothing will be actually tested. A statement-of-need will always be formulated toward the end of the opening paragraph; if a hypothesis is not used, this statement is sufficient. Interestingly, in many instances, the information gained through the activities that are carried out as part of a statement-of-need – driven grant can then be used in to formulate a hypothesis in a later grant proposal. In other cases, there is simply a need to accomplish some critical task that will ultimately benefit society (such as a critical historical account of the relative impact of capital punishment upon specific characteristics of urban crime in the early colonial United States).

NOTE: An important tip to better link your long-term goal, objective, and central hypothesis is to avoid the temptation of interposing explanatory information — extraneous details — between them. These components should be as closely juxtaposed as possible so that there is a seamless flow of logic of one to the next.

7. Statement of rationale. After your statement of central hypothesis (or, in the case of a statement-of-need project, after your statement of the objective of this proposal), you should have a specific statement of rationale. (Note that the *rationale* is spelled with an “e” and thus distinguishes it from *rational*.) All Overview/Executive Summary sections should contain a statement of rationale to describe to the reviewers exactly why you want to carry out the activities that you have proposed in this grant proposal. The statement of rationale should inform the reviewers *what will become possible after the proposed studies are completed that is not possible now*, that is, why you actually *decided* to do what it is that you have proposed to do. Remember that the reason that you are doing these activities in the first place is to help the funding agency achieve its mission; therefore, the statement of rationale must be formulated with the mission of

the funding agency in mind.

“What will become possible” must, once again, provide the important linkage back to the gap in the knowledge base, problem, or need that you described at the end of the first paragraph (that, itself, relates to the mission of the funding agency). When the studies that you are proposing to do or the activities that you have outlined in your proposal have been completed, you will be able to either do something that was not previously possible or achieve something that was not previously achievable. In a nutshell, that is why you want to undertake the proposed project. A well-written rationale can be a very powerful means of engendering enthusiasm and advocacy for your proposal among reviewers, because the outcomes of the proposed activities will clearly advance the field or benefit society (as would the mission of the funding agency).

8. Why you are well prepared to undertake the study and how your environment and institution will be an asset. We recognize that, for virtually all grant proposals, you will have an opportunity to provide a copy (or at least a Summary) of your qualifications and those of your colleagues through a Biographical Sketch or Curriculum Vitae section (see CHAPTER 14). However, when you do this, understand that this is passive information that you are providing to the reviewers for them to interpret. In addition, this information does not necessarily discriminate the facts that would make you and your colleagues uniquely qualified to undertake the work outlined in this grant proposal. Use the final section of the second paragraph to introduce those key important facts that would make you uniquely qualified to address the issue or solve the problem identified in this proposal. In other words, this is your opportunity to be proactive in promoting your qualifications.

Therefore, you should complete the second paragraph by conveying to the reviewers exactly why you and your colleagues are better prepared than other, potentially equally qualified applicants to undertake and successfully complete the project. This component needs to tell the reviewers that you and your team have the competitive edge to do the project and that you will be working in an environment and at an institution that are highly conducive to its success. This should not be a collection of routine biographical material and resources. It should be restricted to just the facts that truly distinguish you and your institution from all other applicants. Most important among the items that you would potentially include here would be your experiences and preliminary activities that have optimally prepared you to now undertake this new project as well as how your institution and environment will support the proposed activities.

TIP: At the conclusion of the second paragraph, the reviewers should know 1) in general, what you plan to do; 2) that what you propose will fill the gap in the knowledge base or address the problem or issue that you have delineated; 3) that you and your colleagues are well prepared to do the proposed work; and 3) that it will be done in an environment and at an institution that are conducive to its success.

Third: “Specific Aims, Goals, and Objectives” Paragraph

9. Specific activities that you will undertake to achieve the objective of the proposal. In this paragraph, the idea is 1) to delineate for the reviewers exactly what the specific steps that you will take during the tenure of this project will be in order to achieve the overall objective identified in the second paragraph and 2) to address the important problem or critical need that you identified in the opening paragraph. Again with respect to the important linkage that must exist among these various sections, your aims or goals must grow out of and be completely concordant with either your central hypothesis or your statement-of-need. This section addresses the important Projected Approach/Plan of Work criterion that reviewers will be looking for. You should break

down your project into several manageable units because having several separate but related aims or goals will make the body of your proposal much easier to write.

The actual number of specific aims or goals that you formulate would depend to some extent upon whether you would classify yourself as a “lumper” or a “splitter.” However, independent of how you would classify yourself, have somewhere between two (as a minimum) and four (as a maximum) specific aims or goals. When you write these specific aims or goals, they should be written as exciting, brief, conceptual headlines and not as long, technically detailed descriptions of what will be done. Furthermore, these statements should inform the reviewers why you want to do what you are proposing, not what you propose to do. In other words, these should be conceptually formulated rather than descriptive. Thus, a well-written aim is usually the answer to the question, “Why do I want to do this?” Finally, it is important to have each of these aims or goals related to the others, but avoid having the feasibility of one aim or goal critically dependent upon a specific outcome of a related aim or goal.

TIP: At the conclusion of the third paragraph, the reviewer should know the logical steps that you plan to take during the course of the proposed plan of work that will allow you to fully test your central hypothesis and achieve your overall objective identified in the second paragraph and therefore solve the problem, address the issue, or fill the gap in the knowledge base identified in the opening paragraph.

Fourth: “Payoff” Paragraph

10. Innovation. The fourth and final paragraph of your Overview/Executive Summary should begin with a specific statement as to why the proposed studies should be considered as potentially novel, innovative, or unique, provided that you can make a credible case for this. What exactly does novel or innovation mean? Usually, the approach you take distinguishes the work as unique. However, a broader interpretation would include anything that would make your project special or single it out from all other grant proposals as different. As pointed out above, it is not mandatory to include a statement of the innovative or novel nature of the proposed project; not all meritorious projects are novel, and projects can still be highly meritorious without necessarily being innovative. Thus, the inclusion of a statement on innovation is optional.

11. Expected outcomes. After your statement of innovation or novelty (if you have one), provide the reviewers with specific information on exactly what you will have accomplished once your project is completed. This would include all the outcomes that the reviewers can expect if they decide to invest in your project by providing it with a favorable review. These would be the deliverables that would ultimately serve as the return on the investment that the funding agency would receive in return for supporting your project. It is reasonable to anticipate that, in general, there should be one important expected outcome for each of your aims, goals, and specific objectives. Linkage here is created by the fact that your expectations should collectively validate your central hypothesis (validation is, at this point, what you expect the overall outcome will be) or fill the critical need that you have identified, either of which will allow you to attain the objective that you defined in the second paragraph and solve the gap in the knowledge base or satisfactorily address the problem that you identified in the first paragraph.

12. Impact. To conclude the fourth and final paragraph of the Overview/Executive Summary, you should summarize in a sentence or two precisely how the accomplishments and achievements that will result from the successful completion of the specific aims, goals, and objectives of this project will positively affect the mission of the funding agency and ultimately the field or discipline

(or society in general). Remember, the entire basis for any funding agency providing you with grant support is because you, as the applicant, are committed to assist in the funding agency in achieving its mission.

These final sentences are sometimes difficult to write because they must succinctly *summarize* what will be addressed in detail in a specific paragraph that will directly follow the Overview/Executive Summary section of your grant application. We refer specifically to the Significance paragraph of your project (which we will discuss in detail in CHAPTER 9). The key is to avoid the redundancy that can occur if these sentences are not written well. The ideal approach would be to make these sentences segue into the important Significance paragraph. Therefore, write this concluding impact statement at a general level (this is the one place in the application where you need to write generally rather than specifically). After you have written this statement, ask, "Does what I have written generally convey to the reviewers what the impact of the expected new knowledge will be once it has been applied?" You will use the Significance paragraph to substantiate the generalization about impact with which you end the Overview/Executive Summary section. The linkage of the impact that you expect should include a full or at least partial solution of the important problem or critical need that you delineated in the first paragraph.

DEVELOPMENTAL STEPS FOR CHAPTER 7

1. The purpose of the information presented in CHAPTER 7 is to introduce you to the concepts that are embodied in writing this all-important Overview/Executive Summary of your grant application.
2. The information presented in CHAPTER 8 is designed to guide you through the actual preparation of a first draft of your own Overview/Executive Summary. Therefore, we will reserve a discussion of the developmental steps until you have finished reading CHAPTER 8.
3. Ascertain whether your proposal will be either hypothesis driven or statement-of-need driven.

CHAPTER 8

WRITING A FIRST DRAFT OF THE OVERVIEW/EXECUTIVE SUMMARY

In CHAPTER 7, which you should have just finished reading, we discussed all the elements of your Overview/Executive Summary section that you need to include in each of the four important paragraphs of this section of your grant application; what each is intended to achieve; and how they should all be linked together into a cohesive, logically developed unit. In this chapter, we will guide you through the process of creating an outline and formulating a first draft of your Overview/Executive Summary. Although an ideal Overview/Executive Summary would usually be approximately one page in length (with Arial 11 font and one-inch margins) using the approach summarized in this chapter, it is often difficult to attain this goal. A more realistic goal with this approach will be approximately one and one-quarter pages for your final draft. The following approach is designed to take you step-by-step through the process of creating your own Overview/Executive Summary — the first step in preparation of your competitive grant proposal.

The overall approach that we will use for developing this important Overview/Executive Summary section will be to first create a bulleted outline for each of the 12 elements identified in CHAPTER 7 and then expand those bullets into sentences. To do this, you will first make a series of responses in a set order, which will become the essential bullets for your outline. Once you are satisfied with the bullets that you have written and how they relate to each other, you will then expand them into sentences that, when pasted into a new file, will become the first draft of your Overview/Executive Summary section. You can then modify, amplify, re-write, and otherwise refine your first draft to produce the version that will become the template for writing the rest of your grant application.

Introductory Paragraph

Step 1. As noted earlier, you need to begin your opening paragraph with an interest-grabbing sentence that satisfies two key criteria: 1) it should contain a sufficient number of keywords so that the reviewers will easily understand what your grant proposal is likely to be about, and 2) it must establish the relevance of your proposal to the mission of the funding agency. It is particularly important that you address both of these issues because you want the relevance of your project to the funding agency's mission to be obvious immediately. For example, if you were writing an application about the difficulty that teenage mothers have in relating to their children (an issue that would be important to any funding agency interested in children's well-being), you would not have your opening sentence say that 1,500,000 babies were born to adolescent women in the U.S. in 2004. Not only is this simply a statement of fact, but it also does not inform reviewers as to exactly what your project would be about. Instead, you would want to open with a sentence that makes clear how important bonding between mothers and their children is for the proper development of social skills, both from the standpoint of successful integration with peers in preschool and kindergarten and the ability to learn in the classroom. Write up to four bullets that similarly convey the importance of your project to a general area of interest. Prioritize those

bullets in terms of which ones most closely reflect exactly what your project will be about.

Step 2. The next step in the development of your bulleted outline is to determine the most important information that reviewers would need to know in order to understand why your project needs to be done. In chronological order, write bullets that succinctly summarize the most important information that is *known* in the area of your project. Because very few, if any, of your reviewers will be true experts in your field, you can begin by assuming that your bullets should include all information necessary to acquaint reviewers with the knowledge base as it currently exists so that everyone will be starting from the same point. Begin with older but seminal observations (the “forest”) and continue until you have reached what is considered the current status of the field (the “tree”). These need to flow logically, one into the next, in such a way that they will lead the reviewers inexorably toward the jumping-off point that you want them to have for your proposal (i.e., the “branch”).

Step 3. Once you have summarized all the bullets that constitute the important knowns, the reviewers should have enough information to appreciate the status of the field in the particular area or discipline. At this point, you will need to introduce the reviewers to essential pieces that are missing and therefore holding back your field or creating a problem or critical need. We emphasize that the specific problem you highlight (i.e., the critical need) and the importance of the problem as it currently exists should be exactly what you intend to address in your grant proposal. It should flow obviously out of the knowns that you have just presented, thereby giving the reviewers the impression that acquiring the missing information or addressing the important problem or issue is the logical next step that needs to be taken to advance the field. Write one or two bullets that clearly define the gap, problem, or issue that will need to be addressed in order to advance the mission of the funding agency.

Second: “What Is Going to be Done by Whom” Paragraph

Step 4. To begin the second paragraph, write a bullet that describes your long-term professional (career) goal. What is the continuum of activities that you intend to follow over the course of your career or, at least, until you have achieved an outcome that will require at least several periods of grant support to attain? What is the niche that you have either carved out or want to carve out in which you are or are planning to become an acknowledged expert? Keep in mind that what you write must generally encompass the problem that you have defined and be credible in scope. For example, if you were an education professional, it would *not* be credible to say that your long-term goal is to prepare all children for success in society after high school graduation. Note also that it would not be an acceptable goal to “study” or “focus on” a given subject area or topic.

Step 5. Your next bullet should define exactly what your specific objective for this proposal will be. What is the next (or first) step that you plan to take in order to progress along the continuum of activities that you have projected for your long-term professional career goal? Write a bullet describing what you want to accomplish by the end of this proposal. (Note that, once again, an objective “to study,” “to investigate,” or “to pursue your interest in” would not be something that could reasonably be achieved by the end of any funding period. All these would be lifetime goals!) When considering what to include in this statement of objective for this proposal, try as closely as possible to ensure a tight linkage or correlation between this objective and the problem or issue that you identified in Step 3. Remember, the attainment of the objective of this proposal *must* fill the gap in the knowledge base or solve the problem or issue that you have identified in that step.

Another word of caution in thinking about the potential formulation of your objective for your proposal would be that you should avoid placing emphasis on the methodology at the

expense of what the methodology is designed to accomplish. The objective should always be to achieve something and not to utilize a specific methodology. For example, if you were to write an objective such as "My objective is to use my bicycle to ride to the grocery store to purchase a loaf of bread," the actual objective would be to purchase the bread, and the vehicle by which this action would be achieved would be through the use of your bicycle. However, the way that this objective is written, the focus is on the use of the bicycle. Unless you intend for the proposal to focus on the bicycle, this would not be the optimal approach to formulate your objective.

Step 6. (If you are writing a statement-of-need – driven proposal, skip Step 5 and go directly to Step 7, for your statement-of-need already developed in the opening paragraph will be sufficient for your proposal.) If you are developing a hypothesis-driven proposal, you will have established in Step 5 exactly what it is that you want to accomplish. Often for hypothesis-driven proposals, the objective will be to fill a gap in the knowledge base and determine how things work. Because you will probably have an idea as to how something happens, you would follow your statement of your objective by presenting that idea as a hypothesis. You should therefore write a hypothesis that, when tested, will result in attainment of the objective for this proposal. Remember, a well-written hypothesis must be objectively testable and cannot project a predetermined conclusion. It must also be compatible with all existing known information. Finally, this hypothesis must include the facts that will set up the specific aims or goals that you will write below, which will be the means of testing it. Once you have written your central hypothesis, write a second bullet that accurately conveys exactly how it has been formulated (i.e., on what basis did you choose it from alternatives that were available to you [and there must be alternatives]?) To the greatest extent possible, emphasize the value of your own work or liminary findings in formulating this central hypothesis.

Step 7. At this point in the development of this second paragraph, your reviewers should know exactly what it is that you want to do and, in a general sense, how you plan to do it. You will provide more detail on the latter when you formulate your specific aim, goals, and objectives below. Now you need to give the reviewers the underlying reason — the rationale — for your decision to pursue this project. This will be your statement of rationale. It must be a reason that is appealing to the funding agency; thus, you really need to understand what the mission of the funding agency actually is. The rationale is *not* a justification of why you have decided to attack a problem using a specific strategy, and it cannot be that the problem you have selected is an interesting one that is worthy of study; rather, it is the fundamental reason that you decided to become involved in the project in the first place. The strategy that you have decided to use (not the rationale) is simply the one that you think will effectively address the problem. As mentioned in CHAPTER 7, *the statement of rationale must tell the reviewers what will become possible after the project has been completed that is not possible now.* It must pass that litmus test! To properly link it to earlier components, it must convey that when all the activities supported by the grant have been completed, you will be able to take the step that the gap is preventing in the knowledge base or the critical need that you have identified. Write a bullet that effectively delivers that message.

Step 8. As we discussed in CHAPTER 4, two of the five criteria most reviewers use to determine the relative merits of a grant proposal are the qualifications of the investigators and the environment and institution in which the proposed work will be carried out. You need to address both of these points here. Why are you and your colleagues better prepared to address the problem that you have chosen than other, equally qualified applicants? Most of the time you will have the competitive edge because of a composite of characteristics, none of which is particularly unique by itself. Collectively, they set you and your co-applicants apart. Sometimes the quantity and quality of your preliminary data make the best case for why you are best prepared to

undertake the proposed research; because of such data, you have a “running start.” In other cases, it may be that you have very strong credentials in carrying out similar projects. Therefore, begin with one or more bullets that inform the reviewers specifically what makes you unique. Continue with additional, complementary bullets (e.g., the combined expertise of the team you have assembled to pursue this project or the extensive experience with similar types of projects). Conclude with a bullet or two about your environment or institution and why it is particularly supportive of the kinds of work that will be undertaken for this particular project. This may be because of essential core facilities (e.g., library archives, ongoing collaborations with local school boards, skilled statistical support provided by the institution) or because you are surrounded by colleagues who have complementary interests. It is particularly important to be as specific as possible with all your bullets here. Avoid the temptation of indulging in clichés (e.g., state-of-the-art equipment) and empty generalities (e.g., Dr. X is an outstanding educator and scholar).

Third: “Specific Aims, Goals, and Objectives” Paragraph

Step 9. For the purpose of Step 9, delineate a series of bullets that represent each of your specific aims, goals, or objectives. Exactly what you call these activities is not important as long as they clearly identify for the reviewers each of the detailed steps that you will take during the course of this grant in order to test the hypothesis or address the critical need and achieve the overall objective. They are probably the most difficult components of the Overview/Executive Summary to write. Therefore, we will review some of the most important points we made earlier and provide you with some additional examples. As you will remember, your specific aims or goals must clearly grow out of your central hypothesis or statement-of-need because they are the means by which you will test the hypothesis or fill the need. They need to be brief, informative, attention-getting headlines that will attract a reviewer’s attention and hold his or her interest. What you want to project, to the extent possible, is not the *what* (the description of the activity itself) but the *why* (what you expect to achieve once the described activities have been completed). The aims and goals you present must fully test your central hypothesis or fill the need, nothing more and nothing less.

Two to four aims or goals are normally not unreasonable; however, restrict yourself to two or three. Each aim or goal should be approximately equal with respect to the amount of work it will entail and the importance it has to the successful completion of the overall project. The first aim or goal must flow logically into and be related to the second, and so on; however, none can be absolutely dependent upon an expected outcome of an earlier aim. Why? Because, in such a circumstance, should the critical aim or goal not be achieved or should its outcome turn out to be different than expected, the subsequent dependent aims could not be pursued as proposed. Using these tips, write separate bullets that summarize your aims or goals. If you are writing a hypothesis-driven proposal, follow each with a second bullet that summarizes the working hypothesis for that aim. If you are writing a statement-of-need – driven proposal, it is obviously not necessary to formulate a working hypothesis for each of your specific aims or goals, but it is usually helpful to write a brief descriptor that would help explain the activity (or activities) that will be undertaken to achieve the aim or goal. It is *not* necessary (or even advisable) to provide a lot of detail here. We are suggesting a specific statement for each of your specific aims, goals, and objectives that will include, at a minimum:

Specific Aim/Goal #1 (***Written in boldface italics***):

Amplifying statement (Working hypothesis or informative descriptor as appropriate).

Specific Aim/Goal #2 (***Written in boldface italics***):

Amplifying statement (Working hypothesis or informative descriptor as appropriate).

Fourth: "Payoff" Paragraph

Step 10. To begin the final paragraph, write specific bullets for any of or all the reasons that you can think why your project might be novel, different, or innovative or somehow differentiate itself from all other proposals that reviewers will read. Do everything possible to identify credible novelty. If you plan to argue that your project is innovative because no one has done it before, remember that simply being first as an end unto itself is not always an appropriate argument. (We can think of many things that have not been done before simply because they were not worth doing.) Therefore, if you plan to argue that your project is first, make certain that the relevance of being first is clear. In addition, avoid including the qualifier "to our knowledge" in presenting the innovative aspects of your project. If the reviewers are not in agreement with your argument, you will simply be confirming the limits of your knowledge. Finally, if after making all efforts you conclude that your work, though important, is just not that special, different, or unique, you are probably better off to write nothing here. In other words, do not simply introduce an element of novelty or innovation that is transparently contrived.

Step 11. Next, write bullets that will inform your reviewers exactly what they can expect from the successful completion of your project as outcomes. These expected "products" should collectively validate your central hypothesis or critical need and attain your originally stated objective for the grant proposal. Accompany each of them with a precise, substantive statement of why that expected outcome is important. *Avoid using empty generalities when you describe why your expected outcomes are important.* You want these to be crisp, focused, and specific. You should have one bullet and one clarifier for each of your identified aims or goals formulated in Step 9 above.

Expected outcome for specific aim/goal #1:
Importance of this outcome:

Step 12. Finally, you need to write one or two bullets that will *generally* convey why your expected outcomes will have a positive impact once the new knowledge that you will acquire is applied or the need has been filled. Consider that the impact must relate well to both your field and the overall mission of the funding agency (the agency that is providing the resources for you to do the project. Once again, you will need to have an appreciation for the mission of the funding agency, as we discussed in CHAPTER 3. Once you are satisfied with the bullets that you have written, you will have created the basic outline for your Overview/Executive Summary that should consist of the following elements:

Introductory Paragraph

Opening Sentence

Current Knowledge

Gap in the Knowledge Base/Critical Need That You Will Address

Second: "What Is Going to be Done by Whom" Paragraph

Your Long-Term Goal (new paragraph)

The Objective of This Proposal

Your Central Hypothesis (omit if you are writing a statement-of-need – driven proposal)

Your Rationale for Undertaking the Project

Why You Are Well Prepared and Have the Competitive Edge

Third: "Specific Aims, Goals, and Objectives" Paragraph

Your Specific Aims, Goals, and Objectives (short, boldface headlines)

Fourth: "Payoff" Paragraph

Novelty/Innovation (optional)

Expected Outcomes

General Impact of the New Knowledge/Fulfillment of the Need.

After completing your bulleted outline, print it and consider carefully how all the elements relate to each other. Do they relate *logically* and well? Remember that we called attention earlier to the key importance of the phrasing of the gap in the knowledge base, or statement of the critical need, because that statement sets up everything downstream with respect to the flow of logic. In this regard, exactly how you present the gap in the knowledge base or frame the problem that needs to be addressed *automatically* sets up the objective, because the objective of the activities spelled out in the proposal will simply be to fill the gap, solve the problem, or address the need by attaining those objectives that you have specified in the proposal. When you write your objective, therefore, you automatically set up your central hypothesis (if your proposal is hypothesis driven). The specific aims or goals, in turn, dictate what the expected outcomes should be, and these must collectively result in attainment of the objective, thereby filling the gap or addressing the critical need.

Also, make sure that your long-term goal encompasses the gap in the knowledge base, or the basic problem, that you plan to fill by pursuing the activities that are outlined in the grant proposal. Be sure that the description of the gap as a problem, or the statement-of-need, at the end of the first paragraph links well with the rationale that you have stated in the second paragraph. The former should describe the gap as preventing an important step in the field from being taken or something from being achieved, and the rationale should make clear that once the activities outlined in the proposal have been completed, it will become possible to take that step or fill that need. *Spend as much time as you need to refine and perfect your outline, making sure that it is as well crafted as it can be.*

Expansion of Your Bullet Outline Into Sentences. Once you are satisfied with your outline, the next step is to expand it into your first draft of the Overview/Executive Summary that will provide the master plan for your grant proposal. To complete your opening paragraph, expand the bullet that you wrote in Step 1 as an opener. Make sure that it reads well and flows easily into the presentation of what is currently known. Also make sure that the sentence you write is as compelling as possible and, as such, will immediately command the reviewers' attention. If you have written a second bullet, use that as a transition to introduce the important knowns. By working from the bullets that list your important knowns (Step 2), write two to three complete sentences that broadly and convincingly state what is known about your subject area. Start with an overview sentence that depicts the "forest" for your reviewers. The two to three sentences that follow should then rapidly narrow the reviewers' focus to what is state-of-the-art knowledge about the specific subject of your proposal (i.e., the "trees" on which you plan to focus). In other words, consider this as a "knowledge forest."

Next, expand the bullet that you wrote to delineate the gap in the knowledge base or the critical need that will then serve as the driving force or focus of this proposal. The sentence or sentences that you write must flow smoothly from those that you wrote about what is known or has been established. Now write a sentence that expands your bullets regarding why the gap in the knowledge base you have selected, or the need that you have established, is an important problem (Step 3). This will be the concluding sentence of the introductory paragraph. Therefore, be sure to write it in such a way that it unequivocally conveys that a real problem exists. Once this opening paragraph has been completed, all reviewers should conclude that this is an important problem that someone needs to address. Note that except under exceptional circumstances, this opening paragraph should not make specific reference to your particular project; the purpose is to simply present the problem.

At this point, you are ready to begin the second paragraph, the purpose of which is to provide your solution to the problem identified at the end of the opening paragraph. You should begin by expanding the bullet that you wrote earlier to state your long-term professional goal (Step 4). As a first attempt, write a sentence by completing the following: "My (our) *long-term goal* is to _____." Note that *long-term goal* has been italicized to make it easier for reviewers to find. As we discussed in CHAPTER 5, the judicious use of highlighting to call attention to things that you know members of the review panel will potentially be interested in is reviewer friendly and therefore good grantsmanship. Now, expand the bullet you wrote to convey precisely what the objective of this proposal is (Step 5). Write a complete sentence, using your own objective: "*The objective of this proposal* is to _____." It is possible that you might have dual objectives. For example, if you were preparing an application for a career development award that might have both a scholarly research activity and a career development plan, your objective would need to address both of these important elements.

Here will be a difference in how you would proceed, depending upon whether you are writing a hypothesis-driven proposal or a statement-of-need – driven proposal. *If you are writing the latter, because you will not have written a Step 6, skip this section and proceed directly to the next section on rationale.* If you are writing a hypothesis-driven proposal, it is here that you introduce your central hypothesis (Step 6) and how it was formulated. *Note the progression from the long-term goal, through the objective, to the central hypothesis (broadest, more narrow, and most focused).* Follow the statement of your central hypothesis with another that expands the bullet that you wrote to describe how your hypothesis was formulated (i.e., why it represents the best bet). For example: "We have formulated this hypothesis based upon preliminary findings, which suggest that _____ (see *Preliminary Studies* for details)." Now, add a comparable sentence to the statement of your central hypothesis.

Next, expand the bullet that summarizes your rationale (Step 7). The rationale statement is often one of the least well-written components of the Overview/Executive Summary section. This is truly unfortunate, because the rationale offers one of few opportunities for an applicant to transmit some of his or her excitement and enthusiasm about the proposed project to the reviewers. It is why you originally decided to do the work, which is exciting — right? (If it is not, perhaps this is the time to rethink the project.) Remember, the litmus test is to ask yourself, "Does this tell the reviewers what will become possible after I have completed the work outlined in the proposal that is not possible now?" Now, write your expanded rationale sentence.

Next, using the bullets that you wrote earlier in Step 8, write a complete sentence or two that summarizes why you and your colleagues have the competitive edge in this particular area that you plan to pursue. In most cases, you will want to emphasize the constellation of your various strengths if no single feature is truly distinguishing. *Regardless of what it is that you choose to write here, you have to be very careful how you construct this component.* The last thing that you want to do is inadvertently convey that you are overly impressed with your own credentials or accomplishments. Conclude this second paragraph with a sentence such as "We plan to test our central hypothesis (or address the need) and accomplish the overall objective of this proposal by pursuing the following specific aims, goals, or objectives (choose one).

Continue by expanding the bullets for your specific aims, goals, and objectives (Step 9). Expand the working hypothesis or short descriptor of the activities for each in a short, subordinate paragraph. Because the aims or goals — the headlines — are so important, use boldface italics and either a single- or double-indent paragraph code to present them. Nothing in the subordinate paragraphs should be highlighted, except for the words *working hypothesis* (and, of course, only if

you have a working hypothesis). Once you have written these, examine them very carefully to determine whether they are primarily descriptive or have a conceptual focus. One of the easiest ways to test for a descriptive aim, goal, or objective is to determine if it will pass the “look and see” test. In other words, ask yourself if you can substitute “Let’s look and see” at the beginning and add “is” or “will be” somewhere toward the end of this aim, goal, or objective. If you can, consider asking yourself, “Why do I want to look and see?” Usually, the answer is actually what your specific aim, goal, or objective will be. This is not to state that all aims, goals, or objectives must necessarily be conceptual; there are many instances, especially in statement-of-need – driven proposals, where descriptive aims, goals, or objectives would be the only logical way to proceed.

To begin your final paragraph of your Overview/Executive Summary section, and if you have written a bullet that describes why your project would be novel or innovative (Step 10), expand it into a sentence. Do not be modest here. If you claim your project is unique, be direct about it: “The proposed studies are *innovative*, because _____.” If you cannot think of a reason why your project is necessarily different, distinguishable, or innovative, then do not worry about including such a statement. Instead, begin by expanding the bullets that present to your reviewers exactly what you expect the outcomes of this project will be and why they are important (Step 11). For example: “At the completion of this project, it is our expectation that we will have _____, which is important, because _____.” You might then follow that with “In addition, we expect _____.” These expectations are important because they are the products that you will deliver to the funding agency in return for the resources that they will provide to you. Conclude the fourth paragraph and your Overview/Executive Summary section by expanding the bullets that you wrote to summarize the general impact that your research will have (Step 12). Make sure that what you write sets up an easy transition into the next section (see CHAPTER 9), which will be your Significance paragraph. In that paragraph, you will detail and substantiate with specifics the relatively general statement about the impact that you write here. You can be relatively brief in these final sentences.

Once you have completed the above, congratulations! You have now written what will probably be a relatively rough first draft of your Overview/Executive Summary. You may need to revise and refine some of your sentences until they flow well and are logically linked together. Add information, if needed, to ensure that the transitions between individual sentences are seamless and logically flow one to the next. If the compelling flow of logic that you need is not there, you may have to partially rewrite the parts that do not work well. It may even be necessary to go back to the bullet outline stage. Whatever it takes, invest the effort until it works. When you are finished, you should have approximately one to one and one-quarter pages (using Arial 11 font and margins of three-quarters to one inch). If you have more material than that, prune what you have written until you meet that mark. *Switching to a smaller font, narrowing the margins, or taking out the spaces between paragraphs to reach the goal of one and one-quarter pages should not be considered.* If you have done this well, this section will convey to all reviewers everything that is important about your proposal. This then will provide the perfect segue into the main body of the proposal, and reviewers will know not only what the project will be about but also why it is important, what exactly will be done, why you are the best individual to pursue this project, and what is expected to have been accomplished when the project is completed. This is valuable information!

However, once you have completed the first draft of this document to the best that it is possible, you still have one important, indeed critical, step: seek and receive critical input from your colleagues concerning the potential strengths and weaknesses of what you have written. We recommend that you ask at least three of your colleagues to help you by providing you with

feedback regarding whether or not you have effectively conveyed the conceptual merit of the proposed work, its overall significance and importance, its impact on the field, and whether they consider the proposal to be potentially novel. You should also specifically ask your consultants and colleagues for ways in which you might improve upon your idea.

You should keep in mind several criteria when choosing which consultants or colleagues to whom you show your overview. First, they have to be individuals in whom you have absolute trust (i.e., you can be confident they will not “take your idea and run with it”). Second, it is essential that most of them be familiar with the field or area of work in which you have an interest, for they will be most able to provide you with a critical analysis of such areas as novelty and potential impact in your field. However, you also need to have individuals who are outside your field because they will be able to tell you whether or not your concepts make sense to intelligent people not familiar with the field. And third, these individuals who you choose to evaluate the merits of your ideas must be colleagues who can provide real, even painful, constructive criticism, should it be needed. With respect to this latter criterion, the kind of person you do not want is one who would be afraid to hurt your feelings by pointing out a potential problem that could derail your project. This process of seeking advice from your colleagues is likely to be a multi-step one that will go through several iterations and refinements. However, do not be discouraged; the end product will be exactly what you are looking for.

DEVELOPMENTAL STEPS FOR CHAPTER 8

1. Prepare an outline that identifies in bullet form each of the 12 key elements that comprise the Overview/Executive Summary of your grant application.
2. Translate the bullets into complete sentences.
3. Use the complete sentences to create the four distinct paragraphs that will serve as the first draft of this document.
4. Critically edit this document for clarity and logical flow of ideas that link individual sentences and sections.
5. Identify three colleagues whom you know will give you critical input. They can include individuals in the field or discipline (who will be knowledgeable about your proposal) as well as several individuals outside your field.
6. Request their critical input to what you have written. Ask them to give you feedback within 48 to 72 hours.
7. Carefully consider the input from your colleagues and revise the first draft of your Overview/ Executive Summary according to the suggestions you receive.
8. Pay attention to concerns regarding questions of understanding and comprehension.
9. Ask for additional feedback on your revised document from colleagues who were particularly critical of your first draft as well as from several new colleagues.
10. Continue to refine this document until you have a consensus that what you have written is clear and concise and as logical as possible.

CHAPTER 9

EXAMPLES OF OVERVIEW/EXECUTIVE SUMMARY SECTIONS OF PROPOSALS

In this chapter we will provide several prototype examples of well-written Overview/Executive Summaries of previously written grant proposals. The first example is a statement-of-need – driven proposal that was submitted to the U.S. Department of Education and approved with high priority for support. We are grateful to the Department of Foreign Languages and Literature at Iowa State University (ISU) for allowing us to reproduce this material in this Workbook. The second example is a composite hypothesis-driven proposal synthesized from several successful grant proposals submitted to the National Institutes of Health. In spite of the obvious differences in focus of these two proposals, we trust that you will appreciate the strong similarities in structural organization of the information presented.

Example #1 Overview and Objectives — Foreign Language Learning

In today's increasingly global economy, professionals in business, engineering, and agriculture must be able to effectively deal with colleagues, competitors, and customers from cultures other than their own. Successful cooperative research, development, and marketing in these and related enterprises will increasingly depend upon all collaborators being familiar with the cultural and linguistic expectations and perspectives that each brings to the table. Although English has, *de facto*, become the primary language for international communication and commerce, both global corporations and international organizations, such as the EU, have increasingly recognized the critical importance of multiple languages and cultures in defining regional markets and interests. One language or one cultural perspective no longer provides even the minimal standard for students aspiring to leadership roles in the global community. Therefore, there is a critical need to develop interdisciplinary academic programs that will interface between departments that focus on multilingual cultural literacy and the professional programs that provide primarily the core competencies for success in specific professional disciplines. In addition, because most professional programs entail extraordinarily heavy academic schedules, such interdisciplinary programs will need to be designed to make studying other languages and cultures both attractive and feasible.

Our *long-term goal* is to create lasting collaborative curricular programs between the Department of Foreign Languages and Literature and ISU's professional colleges to better prepare our students to function effectively in a global environment. Our *objective* in this proposal is to strengthen the new Languages and Cultures for Professions – Engineering secondary major and to establish similar programs in collaboration with the Colleges of Business and Agriculture. A critical need for such programs at ISU is evidenced by the fact that multinational corporations with

close ties to ISU increasingly express interest in recruiting students with the requisite international culture and language experiences. We have also witnessed significant increases in interest among students in pursuing secondary majors in foreign languages; however, the demands of most professional programs have made this difficult. Introducing a major specifically designed for professional-degree programs will allow us to make this a reality for a much larger group of students. We have strong institutional support for this project, grounded in ISU's strategic plan to "encourage globalization initiatives for a better understanding of the multi-cultural and international world in which our future graduates will live and work." A faculty-directed departmental task force first initiated the development of the Languages and Cultures for Professionals programs in the fall of 2002. Dr. M. Rectanus, Director of the task force, has already developed programs in area studies and professional communications courses within German. Each language group has representation on the task force and the full and active support of the Department's Chair. We propose three primary objectives for this project:

Objective #1: *Implement a secondary major option in Languages and Cultures for Professional Programs within the Department of Foreign Languages and Literature.* We have created a major for students in Engineering beginning in academic year 2003–2004. We will develop parallel programs with the Colleges of Agriculture and Business and will emphasize developmental roles of cultural literacy and linguistic skills for students in these professional programs.

Objective #2: *In order to enhance the secondary majors developed as part of Objective #1, we will create stronger bridges between courses in Foreign Languages and Literature that already have a professional focus and those courses that have an area studies focus.* This will include revisions to existing area studies courses (e.g., Germany Today, Contemporary France) as well as the introduction of new area studies courses in Chinese, Russian, and Spanish.

Objective #3: *Refine and expand the study-abroad and internship programs for students enrolled in the Languages and Cultures for Professionals programs.* We will continue to develop new relationships and expand existing relationships with corporate partners to significantly increase opportunities for meaningful culturally relevant internships for students in the professional colleges.

The Languages and Cultures for Professionals major will be unique within the Iowa Regents University system. Currently, no other universities in Iowa offer a specially designed major option in foreign languages for professionals. Instead of conceptualizing courses in business and professional communications merely as add-ons to an existing curriculum, the proposed project will integrate and diffuse elements of professional communications with those of global literacy. The successful completion of this project is expected to result in four substantive project outcomes. First, we anticipate a significant increase in the number of students in professional programs who will declare a secondary major in foreign languages by choosing the new Languages and Cultures for Professionals option. Second, the students enrolled in this new major can be expected to achieve a higher level of linguistic proficiency and global literacy than most of their peers in professional programs. Indeed, this new major will expand the boundaries of their primary major by requiring them to develop a framework for their professional practice as it relates to diverse sociocultural contexts. Third, students will develop the ability to work creatively and collaboratively with students in other professional and liberal arts majors through both their academic course work and internships. Finally, the programs will enable us to strengthen and expand our ties with corporate partners who need students with training and expertise in language and culture and are willing (and able) to support our efforts by assisting with

internship opportunities, resources, and expertise. The Languages and Cultures for Professionals programs will provide a much-needed and unique platform and forum for global education at ISU that is embedded within the professional major while at the same time create new opportunities for collaborations among students, faculty, and corporate leaders.

Example #2 **Overview and Objectives — Pharmacology of Wound Healing**

Integrity of the skin as a protective barrier is one of the more important innate host defense mechanisms, and reestablishment of that barrier function after injury through wound healing is essential to prevent infection. In a number of diseases (e.g., diabetes, scleroderma, severe acne), persistent dermal lesions are significant causes of morbidity in the U.S. and throughout the world. In diabetes, these dermal ulcers are exceptionally problematic to treat and can ultimately require surgical intervention. Given the extensive increases in the incidence of diabetes during the past several decades, it can be anticipated that this problem will continue to present challenges in treatment strategies. The underlying mechanisms responsible for wound healing involve the initiation of an early post-injury inflammatory response leading to the production of fibroblast growth factor that, in turn, initiates extensive fibroblast proliferation at the site of injury and subsequent reestablishment of the protective dermal barrier. Although relatively few strategies to enhance wound healing have been identified, recent studies have suggested that treatment of wounds with either recombinant human fibroblast growth factor or human IL-13 have both shown promise in preliminary clinical trials; unfortunately, both treatment strategies are expensive and not practical for long-term usage. Therefore, there is a critical need to identify therapeutic agents from more abundant natural sources that would be effective in enhancing wound healing and at the same time be relatively inexpensive and suitable for long-term topical usage.

Our *long-term research goal* is to discover and develop pharmaceuticals from natural products that can be used in the treatment of human disease. Our *objective* in this proposal is to identify the active component present in extracts of the common garden plant *Gardenia jasminoides* that enhances wound healing in an experimental animal model and to identify the mechanism of its action. This research is predicated upon our strong preliminary data showing that lipid extracts from *G. jasminoides* have several potentially important biological properties, including the ability to activate fibroblasts, and that *G. jasminoides* may be an effective therapeutic agent to treat wounds in rabbits. Our *central hypothesis* is that the active component present in *G. jasminoides* is a lipid beta-carotenoid and that it directly activates fibroblasts to proliferate at the site of wounds. Our *rationale* for these studies is that the identification of medicinal compounds that can promote wound healing in experimental animals would establish a strong scientific framework for eventual clinical trials in humans. We are especially well prepared to undertake this project because, in addition to our strong preliminary data, the P.I. (D.J. Smith) has earlier identified and characterized a potent anti-tumor agent active from the crocus plant (crocetin) that is highly active in the treatment of prostate cancer. (Smith, D.J. et al; Cancer Research, 2004, in press). We propose the following specific aims:

Specific Aim #1: Identify the active component(s) in *G. jasminoides* responsible for enhanced wound healing *in vivo*. Our *working hypothesis*, based upon strong preliminary data to be presented in the proposal, is that the active component is a lipid beta-carotenoid.

Specific Aim #2: Determine the mechanism of action of the active component present in *G. jasminoides* that enhances wound healing. Our *working hypothesis*, also based

upon preliminary data, is that the active component directly stimulates fibroblast proliferation through the FGF receptor.

These studies are *innovative* in that the identification of a biologically active compound from natural sources that is present in relatively large amounts would provide a ready reservoir of a medicinal compound that could be used to treat wounds. At the completion of these studies, it is our expectation that we will know what that active compound is that is present in *G. jasminoides* as well as the mechanism by which it promotes healing of wounds. It is likely that this compound will turn out to be a lipid beta-carotenoid; however, even if it is not, we expect to be able to identify it. We also expect that this compound will activate fibroblasts, either directly or indirectly, through the FGF receptor. The successful completion of the studies is expected to have a potentially important impact in several fields of medicine, from diabetes to dermatology and immunology.

DEVELOPMENTAL STEPS FOR CHAPTER 9

1. Compare your Overview/Executive Summary as written in response to the format of Chapter 8 and compare it for structural similarities with the two examples presented above. Modify your Overview/Executive Summary accordingly.