

## **DEVELOPMENTAL STEPS FOR CHAPTER NINE:**

1. Describe your long-term goal.
2. If repeating your long-term goal here after doing so in the *Overview & Objectives* section creates the appearance of redundancy, delete the earlier goal statement. Offer it here, only.
3. Assess your past research accomplishments and summarize how they have led you to propose what is in this application. Include references to your pertinent publications.
4. Summarize how the expected outcomes of the proposed research set the scene for future research.
5. Make a list of the specific steps and the sequence in which they must be taken in order to reach your long-term goal.
6. Expand the steps into a detailed description of the projected continuum of research that you will be following after completing this project, emphasizing its importance and that its systematic development will lead to attainment of your long-term goal.

## **EXAMPLE (TRUNCATED) OF RELATION TO PRINCIPAL INVESTIGATOR'S LONGER-TERM GOALS SECTION:**

Our long-term goal is to identify the full spectrum of chemical interactions that is involved in BAMPHI-catalyzed oxidations of a diverse range of substrates. The importance of this area is acknowledged in a wide range of fields, including \_\_\_\_\_ (ref), \_\_\_\_\_ (ref) and \_\_\_\_\_ (ref). The work proposed in this application is the next vertical step along a continuum of research that my colleagues and I have been systematically pursuing for the last eight years (see 'Publications' section of the *Biographical Sketch*). During that time we have identified \_\_\_\_\_ (ref) and \_\_\_\_\_ (ref) as key early participants in the cascade of reactions that collectively lead to oxidation. The body of work to date has additionally confirmed that use of a mutant form of enzyme X (ref) will allow the characterization of intermediates that have been hypothesized to exist but not observed. These accomplishments, together with molecular characterization of the cleavage sites in three representative substrates (refs), have positioned us to now address \_\_\_\_\_, which is the subject of this application. Successful completion of this step is expected to inform subsequent studies that will focus on developing more detailed understanding of the intermediates that take part in the different reactions, as well as clarification of which factors control the relevant chemical interactions. Specifically, we project that \_\_\_\_\_ would be investigated next. This, in turn, would be expected to lead to \_\_\_\_\_. It is highly likely that accomplishment of those two steps would provide the foundation from which the final step of \_\_\_\_\_ could be taken. This progression of research is expected to ultimately yield the fundamental understanding of BAMPHI-catalyzed oxidations that is so widely needed.