The Art of Grandsmanship (by Jacob Kraicer) mind-mapped by EvangelosErgen

Parts of Proposal

1. Title Page

- it sets the first impression
  - it should be descriptive, specific and appropriate
  - it should reflect the importance of the proposal
- you might have a two part title (the first general and the second more specific)

2. Abstract/Summary of Proposal

- succinct and accurate description of the proposal
- the contents to include: hypotheses, objectives, approaches, research plan and significance
  - state the hypotheses to be tested; give the long-term objectives; state the specific aims; make reference to how the proposal is directly related to the mission and objectives of the institute your application is being made

3. Recommended External Reviewers (if requested)

4. Proposed Research

- hypothesis and long term objectives
  - begin with the stated hypothesis and tie this with the long-term objectives
  - what is the proposed specific research intended to accomplish?
  - what is the significance and relevance of the research?
- specific aims
  - these are the specific projects, studies and items that will be undertaken in order to fulfill the long-term objectives
  - put them in logical, sequential order and define priorities
- Background and Significance: Current State of Knowledge
  - what is known, what is not known and why is it essential to find out
    - begin with a brief outline of the highlights in the background review
  - critically evaluate the relevant literature
    - discuss fairly all sides of a controversy, disagreement and discrepancy in published results
  - identify gaps and contradictions; carry this into the rationale of your proposal
    - emphasize the importance and relevance of your proposal in bridging your hypotheses and long-term objectives to the background review
  - integrate your previous findings within the background to give the reviewers a sense of your relevant contributions
- Progress (as related to Background & Significance)
  - you need to convince the reviewers of your excellent and relevant training and that you have already substantial preliminary data and pilot studies
    - list your publications and manuscripts submitted or accepted
    - review your preliminary studies and results; present the actual data; this will help to establish competence and credibility
- Preliminary data/studies
  - these should be tied directly to your hypotheses and long term objectives
    - describe preliminary data that are relevant and pertinent; show actual data
- Research Design and Methods
  - the specific aims have stated what is your purpose; now you must describe how you propose to fulfil these Aims
    - be focused and clear
    - put the aims in a logical and sequential order; consider a brief opening paragraph describing the relationship of each specific aim to each other and to the overall objectives
  - provide a brief tentative sequence and timetable for the project; clearly define priorities;
- Budget
  - you may be required to recommend a budget independent of the scientific merit of the proposal
    - budget usually is considered last after the merits of the proposal have been decided and score has been given
  - make sure the budget is well documented, realistic, appropriate and justified
- Other grants received/pending
  - be honest and complete;
- Appended documents and publications
  - do not include documents that are not required
  - aim for good number of abstracts/full length papers are not well-received

before you start to write do some preparation

- read guidebooks, guidelines and PhD application forms
- make sure your proposal might fit with the mission of agency/institute your are requesting financial aid
- try to find a contact in the institute who will welcome your questions and answer them
  - check which are the funding levels of this institute (what they usually pay or offer as scholarship-financial aid)
- it would be ideal to find someone who has already been funded from this institute and share his experience with you

formulate and clarify your ideas

- do you have a clear, concise and testable hypothesis?
  - are your objectives and aims coming into focus?
    - what questions are to be addressed?
- can you define and design specific experiments that will test directly your hypothesis?
  - put together and write up your work and try to publish it
- discuss your ideas with colleagues in the same and relevant fields
  - go through the process of explanation and discussion in order to clarify your ideas and identify possible gaps in logic