Note the title carefully. I can not tell anyone how to write a research proposal that will succeed in raising money for some particular project. I can however recommend ways to take a good idea and so present it that it can't be funded. Furthermore, if one avoids these traps, the chances of funding improve markedly….

Here are the five critical points; five ways to write a losing proposal:

1) **Propose something that's already been done** (or is only a minor extension of what's been done). If you propose to continue doing what you did in graduate school, or what you did during the last three years of your prior grant, you'll get a yawn from the reviewers and thumbs down from the agency. Antidote: propose something new.

2) **Write a review article instead of a proposal.** Thirteen pages of review followed by two pages of new ideas or 11 pages of review, two pages of preliminary results, and two pages of new ideas will not get you any money. Antidote: write a review article and get it published. Refer to that article in the first few pages of your proposal, highlighting those points which lead you to your new problem. Then spend most of your time saying what you'll do, how you'll do it, why it matters, and why the taxpayers (or corporate sponsors or whoever) are better served by giving you money than using it themselves.

3) **Have a solution looking for a problem.** This is why method developers have trouble getting grants. Antidote: find some REAL problem. Propose a viable solution to that real problem. It may well be that developing a method will help solve that problem. But solving non-existent problems is not something many people wish to spend their money on.

4) **Find someone else's bandwagon and climb on board.** Antidote: find a sufficiently important problem that you'll establish next year's bandwagon. Then you'll have other people chasing you (and your grant) rather than the other way 'round.

5) **Be blinded by subfield boundaries.** Lines such as, "To do this would require theory, and I'm an experimentalist," [or] "I'm no biologist, so I'll develop this method in the hopes a biologist might find it useful some day" will do wonders to increase your number of declined proposals. Antidote: find a co-investigator who can fill in those parts of the science for which you aren't qualified, or at least someone who can say they'll provide those small pieces of the project which require outside expertise. This also helps with 3) above. "But the only grants that count are ones on which I don't collaborate," you justifiably say. Funny -- if the particle physicists had said that between 1930 and 1993, there would be no Tevatron, SLAC, or CERN. "Small Science" hasn't caught on to this yet. Don't duck this tightrope -- learn the constraints you're working under and play by the rules. You can't change the rules 'til you've won under someone else's rules.
More on How to Lose a Proposal


"... the most common reasons for unsuccessful applications boil down to a surprisingly small set of simple and familiar failures.

1) Deadline for submission was not met.
2) Guidelines for proposal content, format, and length were not followed EXACTLY.
3) The proposed question, design, and method were completely traditional, with nothing that could strike a reviewer as unusual, intriguing, or clever.
4) The proposed study was not an agency priority for THIS year.
5) The proposal was not ABSOLUTELY COMPLETE in describing one or several elements of the study.
6) The author(s) simply did not know the territory as revealed in the review of literature.
7) The proposed study appeared to be beyond the capacity of the author(s) in terms of training, experience, and available resources.
8) The proposed method of study was unsuited to the purpose of the research.
9) The budget was unrealistic in terms of estimated requirements for equipment, supplies, and personnel.
10) The cost of the proposed project appeared to be greater than any possible benefit to be derived from its completion.
11) The author(s) took highly partisan positions on issues and thus became vulnerable to the prejudices of the reviewers.
12) The quality of writing was poor—for example, sweeping and grandiose claims, convoluted reasoning, excessive repetition, or unreasonable length.
13) The proposal document contained an unreasonable number of mechanical defects that reflected carelessness and the author's unwillingness to attend to detail. The risk that the same attitude might attend execution of the proposed study was not acceptable to the reviewers."