Writing a successful proposal

1. **Be mindful of probabilities.** 10-15% is what you can typically expect. Your proposal needs to be better than 85-90% of all other proposals. Gulp.

2. **Allocate sufficient time.** Successful proposals take time. Substantial time. Think 2-3 weeks of undivided work on the proposal. An average time effort for successful proposals is ~115 PI hours.

3. **Plan your work accordingly.** Most proposals are solicited, with an annual solicitation window. Aim to get everything done in that timeframe.

4. **Form a team of co-investigators.** While certainly possible, it is not too common to propose for a single person project. Make sure that your team is strong and that everyone has assigned tasks.

5. **Submit a Letter of Intent (LoI).** LoI is rarely required, but it is considered good citizenship if you do it. Funding agencies use LoIs to assess community engagement in the solicitation.

6. **Boilerplate stuff.** Each submission requires it, and there's usually an office to help with those. Boilerplate includes CVs, current & pending, data management plan, advising plan, compliance statements, …

7. **Budget.** This is a big one. Figure out what you need in order to complete the proposed work. Think salaries, wages, consultant fees, equipment, travel, paper/poster charges, incidentals, …

8. **Scientific justification.** The <u>make-it-or-break-it</u> for every proposal. Important aspects:
   1. adhere to solicitation requirements at all cost;
   2. choose the title of the proposal wisely – put <u>a lot of thought</u> into it;
   3. write the proposal clearly, persuasively and concisely. Address why the questions are pertinent, timely and interesting, demonstrate that the project is technically feasible, that the team has the expertise to execute it, and that the methodology will be able to answer the questions. The proposal should be written for informed audience <u>but not experts</u> in the field;
   4. keep the scientific justification to point, well grounded in literature, and well structured. Use sections, subsections, refer to tables/figures, make sure everything is captioned;
   5. avoid overuse of different fonts/emphasis – make the presentation appealing and easy to read;
   6. proof-read the scientific justification; each typo is an unacceptable atrocity.

AST 4122 SOLICITATION RULES:

- Project Description must not exceed the 6-page limitation.
- The formatting of Project Description must use letter paper, 1" margins, single column, font size of 11pt or larger.
- Project Description contains, as a separate section within the narrative, a section labeled "Broader Impacts".
- Project Description is self-contained, and Uniform Resource Locators (URLs) have not been included.
- Results related to Intellectual Merit and Broader Impacts are described under two separate, distinct headings.
- References include bibliographic citations only and do not provide parenthetical information outside of the 6-page Project Description.
- Each reference is in the required AAS TeX format.
- Each biographical sketch must follow NSF style and it must not exceed two pages.
- A list, in reverse chronological order by start date of all of the individual's academic, professional, or institutional appointments, beginning with the current appointment, has been provided for each individual.
- Each budget line item has been documented and justified in the budget justification.
- An aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded, has been included.
- A data management plan, limited to two pages, has been included.