

# Writing the First Proposal: Why is it difficult?

- A proposal is a sales pitch, where you need to sell your ideas and yourself.

**How? Get help:**

[Onepagers](#) [Short guides to starting scientists]

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[http://www.physics.ohiostate.edu/~wilkins/onepage/first\\_funds.html](http://www.physics.ohiostate.edu/~wilkins/onepage/first_funds.html)

- **Every first proposal should read as a renewal proposal:** The project is so far along that it would be a mistake to stop it. You are the ideal person to carry out the research and, in fact, are already doing!

# Writing the First Proposal: What I did?

- **Got advice:**
  1. Collaborators & colleagues
  2. Grant writing workshops
- **Read, read, read the call for proposals:**

NSF merit review criteria: Intellectual merit/Broader impacts

CAREER: “support the early career-development activities of those teacher-scholars who most effectively integrate research and education within the context of their organization”
- **Got help, help, help:**
  1. CAREER: Department chair
  2. Support letters from collaborators
  3. Reading/criticizing
  4. Checking grammar, references, formatting....

## **Research: computational modeling of materials for spintronic devices**

**3 projects: diluted-magnetic semiconductors (bulk), diluted-magnetic semiconductors in quantum dots, organic magnetic semiconductors.**

## **Outreach: nanoscience/nanotechnology, High-performance computing**

**3 projects on nano: undergraduate course nanoscience/technology, summer workshops for high-school teachers, development of educational materials (modules).**

**Training in high-performance computing**

# What did the reviewers like it?

## Broader impact

- The outreach portion is unusually extensive and well thought out.
- As far as the broader impact, I think this is one of the most ambitious, yet carefully thought out and planned proposals I have even seen....
- Proposed educational and outreach efforts are very comprehensive ... particularly valuable to the scientific education in the state of North Dakota.
- The educational component is excellent. It is closely linked with the research proposal and addresses a real need...
- The PI is clearly enthusiastic about courses at various levels....

## Preliminary results

- A part of the research is a valuable continuation of already developed lines of inquiry...
- The PI has provided promising preliminary results...

## Letters of support

- The PI has carefully planned extensive collaborations, supported by very strong letters, so I no longer have concerns whether the proposed work could be accomplished.
- The proposal has an impressive number of letters of support....