



BARRY GOLDWATER
SCHOLARSHIP & EXCELLENCE IN EDUCATION FOUNDATION

Myths and Missed Opportunities in the Goldwater Scholarship Application and Review Process

Goal: To encourage more students to apply and to
help improve their applications

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2026 Goldwater Scholarship Competition

In this Open House, we will:

- Review some misconceptions about how Goldwater applications are reviewed
- Dispel some myths about how Scholars are selected
- Identify overlooked opportunities for students to strengthen their application
- Pinpoint constructive ways for recommenders and campus representatives to amplify their support for applicants
- Address any of your concerns about other potential assumptions or missed opportunities in the Goldwater application and selection process

Myth: Students interested in a research career as faculty members at an academic institution are not eligible for the Goldwater Scholarship.

Reality: Research careers may be pursued in a variety of settings including academic institutions, private industry, national laboratories (e.g., Oak Ridge, Sandia), federally-funded agencies (e.g., NASA), etc.

The career choice will be influenced by field of interest, desired work environment, and long-term career goals.

Myth: There's a cap on the number of Scholars named from a given state.

Reality: Scholars are chosen with no consideration of their home state or institutional state.

Applications are reviewed by discipline.

Myth: There's a cap on the number of Scholars named within a given discipline from a given institution.

Reality: Multiple scholars can be chosen within a given discipline from the same institution.

As a consequence, do not “rank” applicants in your CR statement.

Myth: Applications from sophomores, juniors, transfer students, and veterans are evaluated separately.

Reality: All applications are reviewed by discipline, and all applications from a given discipline are reviewed together.

Remember, reviewers evaluate applications holistically, giving balanced consideration to all elements of the application.

Myth: Certain disciplines are favored in the Goldwater competition.

Reality: Scholars are selected among the disciplines in accordance with the percentage of applications in each discipline.

Example: If 10% of the applications are from chemists, approximately 10% of the awards will be made to chemists.

Myth: Goldwater Scholars are selected based on financial need.

Reality: Goldwater Scholars are selected on the basis of *merit and exceptional promise* of becoming this Nation's next generation of research leaders in science, engineering, and mathematics.

There is an optional question where students may address any socioeconomic impacts that they have encountered that influenced their education - either positively or negatively. The CR statement might further acknowledge such impacts.

Myth: Most Goldwater Scholars are co-authors on at least one peer-reviewed publication.

Reality:

- Co-authorship is *not* a requirement or the rule for Goldwater Scholars.
- Most applicants *do* report that they have given a presentation on their research.

Myth: Most Goldwater Scholars attend major research universities, and students from other campuses will not likely be designated a Scholar.

Reality: A student's institution is not a selection criterion. However, reviewers do give careful consideration to the institutional context.

For example, when research opportunities are limited on campus, reviewers will look for other evidence of research potential. Reviewers ask themselves, did an applicant take the most of the available opportunities? The CR statement is an excellent place to discuss the institution's research environment.

Myth: Participation in many research projects is preferred.

Reality: Quantity of projects is immaterial.

What is important is that the student's application and the reference letters from mentors:

- demonstrate student ownership of a project (or projects),
- provide examples of creative thinking,
- indicate the student's enthusiasm for research and potential for making future contributions in their discipline.

The application provides a section to offer an explanation for the research path chosen and how that path will assist in achieving one's professional goals. A single longer-term project can lead to more outcomes. Multiple projects can develop more skills and refine one's career goals.

Myth: Students who are unable to conduct research in their anticipated area of interest are at a disadvantage.

Reality: Reviewers recognize that research opportunities in a student's preferred future area of investigation may be limited on a given campus or in undergraduate settings.

In such situations, students should:

- Clearly describe ***why their proposed research area is of interest*** and ***how they will receive the appropriate training to contribute to that field.***
- State how their ***current research participation is developing the various skills beneficial*** to their future research field.
- Describe the ***courses that assist in preparing*** for their prospective research investigations. Include required courses in the major, elective advanced courses in the major, and cognate courses outside of the major.

The application is further strengthened when research mentors mention how what the students has learned in the project(s) will contribute to the student's career goals and growth.

Myth: All Goldwater Scholars have high GPAs.

Reality: The Goldwater eligibility requirements simply state that all applicants must “have a college grade point average of at least a 3.00 on a 4.00 scale.”

- Reviewers evaluate applications holistically, giving balanced consideration to all elements of the application.
- Reviewers appreciate knowing that personal or family illness, financial concerns, and other issues might have impacted academic performance for a particular time period.
- The GPA range for Scholars over the last five years has been from 3.15 and up.

Myth: Campus representatives who are faculty members cannot write recommendation letters for their research mentees who are Goldwater applicants.

Reality: The Goldwater Foundation does not view this situation as a conflict of interest.

- Your service as a CR should not prevent your research students from applying.
- ***An application that does not include a recommendation letter from the research mentor would certainly raise a red flag with reviewers.***
- Simply note that the applicant is your research student in your CR statement and include your recommendation letter in the application packet.

Missed Opportunity: The career plan is limited in scope.

Suggestions:

- Describe how your undergraduate research experience supports your future career goals.
- Provide your specific plans for graduate school and post-doctoral research (if possible).
- This response should set the stage for the rest of the application, which will show how your past activities are all leading you toward the goals outlined here.

Missed Opportunity: A superficial description of the most recent research experience is used to answer the activity/experience question.

Suggestions:

Tell a story about a moment that shaped your desire to pursue a career in science, engineering, or mathematics research.

- Take the reader INTO your story with a powerful beginning.
- Take the reader THROUGH your story, providing context and key parts of your story that helped shape your character as a scientist.
- Take the reader BEYOND by discussing how this experience will help you lead a successful scientific career.

Missed Opportunity: The applicant does not answer the optional question on diverse economic, ethnic, and occupational family backgrounds.

Suggestions:

- Empower your response by focusing on the ways in which you dealt with the situation and the character you developed, all of which should connect back to your career in STEM.
- If your background and experiences are such that you did not face adversity, this is an opportunity for the reviewers to get to know more about you. Describe how you challenged yourself and took advantage of opportunities to succeed in your career.

Missed Opportunity: The research essay does not clearly describe the applicant's role in the research.

Suggestions:

Carefully read the essay guidelines posted on the Goldwater Foundation website.

The following information about your role in the research project is ESSENTIAL. Include it in the different parts of your essay. Use "I" to emphasize on the work that YOU were responsible for.

- Explain your specific contribution or expected contribution to the work (as opposed to those with whom you may have worked). In doing this, you may tie back to the research activities section so that the two parts of your application are complimentary.
- Describe the skills you brought to the work from prior research or course experiences.
- Talk about the skills you have or expect to obtain from participation in the project.

Missed Opportunity: A letter does not describe the student's role in the research, does not mention paper or presentations in preparation or planned, or does not assess research potential, etc.

Suggestions:

Letter writing guidance developed using reviewer input is available on the Goldwater website. A downloadable version is also available to give to the letter writer.

<https://goldwaterscholarship.gov/letter-writing-guidance-recommenders/>

Missed Opportunity: The Campus Representative does not provide a CR statement.

Suggestions:

The CR statement is useful to the reviewer because it may provide

- Insights into the thought process for nominating the student.
- Context for any aspect of the application.
- Additional information about the applicant.
- Explanation for apparent inconsistencies (e.g., a missing mentor letter).