

Tips for completing the Barry M. Goldwater Scholarship Application

Timeline

- Mid-late October: complete pre-applications and talk to research mentors and professors about letters of recommendation.
- October 22, 4:30-5:30PM; GHC 4211: Goldwater Application Workshop
- October 23: Pre-application deadline. Confirm recommenders to Brittany Allison. (ballison@andrew.cmu.edu). At this time, Dr. Allison will begin inviting your recommenders to submit letters for the November 27 deadline.
- CAMPUS DEADLINE: November 27, 12:00PM (noon) Your complete application, including the three letters of recommendation, must be submitted by this date.

Letters must be EMAILED to fso-general@andrew.cmu.edu by November 27.

- First two weeks of December: Internal campus review and nomination decisions
- Mid-December: Nomination decisions announced (you will be notified either way)
- Final nominee deadline: **January 27, 2020** If you are one of the four CMU nominees, you will work with us and a mentor in your field to polish your materials ahead of this date.
- Late March: Goldwater Scholars and Honorable Mentions announced

What to Submit for the Campus Deadline

- 1. A signed Fellowship and Scholarship Office Consent Form
- 2. Your completed online application hit the 'submit' button
- 3. Your research essay of no more than 3 pages (see the detailed Goldwater instructions online)
- 4. Transcripts from all colleges attended (Unofficial is fine at this stage)
- 5. Three letters of recommendation emailed directly to fso-general@andrew.cmu.edu

Application Tips

These tips represent knowledge gathered from both successful and unsuccessful past Goldwater applicants, insights shared between fellowships advisors, and information from the Goldwater Foundation (see here) itself.

Career Goals/Professional Aspirations

- Be specific and concrete. Use declarative sentences. The plans you express here should reflect a commitment to a **research career**, *not* medical or veterinary practice, business, etc.
- In the second text box, which asks about your current and future academics, explain how your current major and subsequent PhD plans will enable you to embark on a career doing [X] research. Which key subfield or topical area do you hope to break new ground in? (E.g., quantum computing, developmental neurobiology, cosmic topology, etc.) How will your current and planned studies get you there?
- The activity or experience you describe as helping to shape your desire for a research career could take
 any number of forms. The key goal here is to convey how/when/why your interest in doing STEM
 research long-term was sparked or reinforced. Many applicants will discuss a significant research
 experience or science-related extracurricular activity. NOTE: childhood stories are usually not very
 effective here.
- The optional personal experience question can be very important. If you are an underrepresented student in terms of race/ethnicity/socioeconomic background/1st generation, this is an opportunity to discuss how your background has influenced your pathway in STEM. Alternatively, you can use this space to showcase dimensions of yourself that won't be evident from the rest of the application. Do you have non-science activities that are key to your identity? Do you study foreign languages, create video games, do

volunteer work, or write poetry in your downtime? Ideally, this discussion would go beyond merely demonstrating well-roundedness and explain how a pursuit contributes to your development as a person and therefore as a scientist. Rather than spread this response too thin across several different activities or personal details, it is often more effective to center around one key thing.

Research Projects – One of the most important application components!

- Ideally, as many of the five spaces as possible with be populated with research projects/activities. Sustained involvement in one lab over time can often be broken down into more than one distinct research experience, as you may have worked on multiple projects or project phases that had distinct outcomes or utilized distinct methods, data, equipment, techniques, etc.
- Internships and co-ops should only be included if they are clear instances of research project/activity.
- Each "Purpose of research" entry should make clear what the objective was, how the research was carried out, what the outcomes were, and what *your* particular role in the research was.
- Things to emphasize: autonomy, research design (if applicable), significant results, and progression over time. From the oldest research experience to the newest, are you exhibiting increasing sophistication, responsibility, and intellectual ownership in the lab?

Research Skills

- List and describe up to 5 acquired research skills that you have gained through research projects/activities
- The research skill description allows you to highlight what you learned, the importance of this skill to advancing you research goals, how this skill allowed you to contribute to research, and the result/impact of you gaining this skill

Other Activities and Accomplishments

- While Goldwater is less focused on non-research activities, showing a diversity of interests and involvement in this section is to your benefit.
- Be sure to spell out names and use brief parenthetical descriptions of clubs and organizations that won't be recognizable to a national review committee.

Recognitions

- A select handful of honors and awards that are meaningful and prestigious is better than a long list of accolades of questionable significance.
- Do not assume that campus or other local awards will be recognizable in terms of purpose or significance.

Coursework

• Mark any graduate-level courses as such by including "(graduate-level course)" after the course title.

Future Academic Plans

- Highest degree you plan to obtain: If you are not, in good faith, selecting the PhD, this award is not a good fit for you.
- If selecting the MD/PhD or DVM/PhD, your explanation in the following text box (and your application as a whole) must make a convincing case that your joint degree will be a gateway to a research career rather than medical practice.

Research Essay – One of the most important application components!

- The strongest essays discuss prior or ongoing research, and then explain how you would build on this research in future work. Avoid redundancy with the earlier descriptions of research activities. This should not simply be a summary of your research, but rather a sophisticated discussion of a problem or issue in your field, how you have addressed it, and the future work your findings suggest.
- Your reading audience is other STEM scientists.
- Read the instructions thoroughly and follow the formatting requirements exactly
- Be sure to work with your PI or another mentor on this! FSO is happy to review your essay from a general fellowships standpoint, but we cannot speak to its scientific accuracy or sophistication.