Goldwater session on reference letters:

advice for Campus Representatives

October 24, 2024

For CRs and Applicants

Recommendation Letters are only <u>one part</u> of the application. Letters do not guarantee selection: Three **Excellent letters** <u>may not</u> result in a scholarship, and **one Poor letter** <u>may not</u> lead to rejection.

For the applicant, choosing recommendation letter writers:

- Is the letter writer familiar with your career aspirations and rationale for your aspirations?
- Can the letter writer provide information about your potential that is not available in the transcript or your statements?
- Have you interacted with the letter writer in a research environment? Choose a letter writer who can speak to your research and/or analytical strengths. **This is a most important criterion.**
- Can the letter writer evaluate your communication skills and/or extracurricular strengths? Choose a
 letter writer who can speak to your personal and/or extracurricular strengths.
- Can the letter writer highlight specific accomplishments? Share these with the letter writer in advance.
- Can the letter writer describe how you problem-solve or deal with adversity, if applicable?
- Is each letter writer able to contribute something different about you that, taken as a whole, highlight your abilities and potential?
- Prepare an "Information Packet" for each letter writer

For CRs and Reference Writers

Recommendation letter should:

- address the Goldwater mission: identify students with the potential to be research leaders in STEM
- provide a detailed assessment with context on how the applicant compares to others

Criteria to address in a Goldwater Scholarship recommendation letter:

- ability and desire to pursue advanced degrees in the sciences and engineering
- potential for a career in a STEM field eligible for Goldwater
- demonstrated outstanding academic and research aptitude performance, maturity, initiative, and motivation
- academic performance highlight significant academic performance and address any academic deficiencies

Advice for Research Mentors

While working with an undergraduate on a research project, encourage the student to take a
leadership role in the project, provide opportunities where the student can build the skills needed
to pursue a research career, encourage mentees to present their research at local, regional or
national conferences, and, when the work arises to this level, involve the student in the
preparation of a publication of the work.

Reviewers will be in your discipline and may be experts in your research area; so briefly describe your research so it is understandable to the generalist and sufficiently detailed to excite the

expert.

Describe specific contributions the applicant made to the research agenda.

Describe applicant's independence, originality, insights, creativity and perseverance, giving specific examples.

Help the applicant with his/her research essay—expect multiple revisions. The applicant should

describe what THEY did to move the research forward.

• If the student is engaged in a project in collaboration with graduate students/postdocs tell them to give the undergraduate significant responsibilities (not just routine, repetitive analyses) and urge the undergraduate to take ownership of the project.

What do scholarship reviewers look for in the letters from research mentors?

- Read many letters in a short time period. Letters need to be succinct but sufficiently detailed to add depth and context about each applicant. Specific examples add important insights and evidence. Extraneous information about the school is ignored. Reviewers look for evidence of applicant's potential to succeed in a research career.
- Use specific review criteria; for Goldwater it is fit with the mission to identify students with the potential and ability to be research leaders in STEM.

General Advice for Letter Writers

Topics to include:

- How the Goldwater Scholarship could affect the student's career trajectory
- Specific examples of how the student displays potential for being a leader in STEM research
- How the student compares with prior students you know and have worked with who have gone on to pursue successful research careers or have been awarded Goldwater Scholarships.

Keep in mind that language matters:

- Avoid IMPLICIT GENDER BIAS in Recommendation Letters:
 - 2016-01-22_LORbias (arizona.edu)
 - Avoid gender bias letters Dutt.pptx (columbia.edu)
 - Gender-bias calculator (slowe.github.io)
 - Avoiding Bias in Recommendation Letters | Center for Research & Fellowships | Georgetown University
- Adjectives to include: successful, excellent, accomplished, outstanding, skilled, knowledgeable, insightful, resourceful, confident, ambitious, Independent, intellectual
- Adjectives to avoid: caring, compassionate, hard-working, conscientious, dependable, diligent, dedicated, tactful, interpersonal, warm, helpful