

Guidelines to Avoid Bias in Writing Reference Letters for Residency Candidates

When writing reference letters for an **excellent candidate**, bias can inadvertently be included that can diminish the positive impact of the letter. The impact of a letter depends on what is included in as well as what is omitted from the letter. Both can be unconsciously influenced by the candidate's gender, race, and other characteristics that are immaterial to their potential for professional success. Hence, letter authors and recipients should take steps to be aware of unconscious biases.

Writing unbiased reference letters is crucial for ensuring fair evaluation of residency candidates. This guide aims to help college members craft effective, equitable letters that accurately reflect candidates' qualifications without introducing unconscious biases. Following these guidelines will contribute to a more inclusive and merit-based selection process.

Establish criteria to provide a reference letter

To start, it is good practice to establish criteria that you, as a letter writer, require to write a letter. The criteria should be shared with all individuals who request a reference letter without exception.

- Set clear criteria for writing reference letters
- Share these criteria with all requestors without exception

Letter structure

The letter itself should begin with a brief description of the author's relationship to the candidate. The remainder should, taken together, provide an objective assessment of the candidate's potential to succeed as a surgery resident and details that support the assessment. Letters should include highlights of the candidate's professional record and accomplishments. Comparisons to other potential candidates should be specific and contain sufficient information for the reader to understand the point of reference. For example, a comparison to "this year's group of interns" doesn't give sufficient context. However, a comparison to "this year's group of outstanding interns" is a more powerful and descriptive comparison.

- Begin with a brief description of your relationship to the candidate
- Provide an objective assessment of the candidate's potential as a surgery resident
- Include specific details supporting your assessment
- Highlight the candidate's professional record and accomplishments

Avoiding bias

References to the candidate's personal characteristics or attributes included in a letter should be specific and limited to what is pertinent to completing a surgery residency.

Personal characteristics to avoid:

- Gender, race, ethnicity, sexual orientation
- Gender identity, pregnancy status, neurodivergence
- Disabilities, religious affiliation, body condition
- Age, country of origin, cultural background

Avoid including stereotypical attributes (e.g., “activist,” “not angry,” “not intimidating,” “unique background,” “ability to speak English”) even if the intent is to emphasize that the individual does not have the attributes. Such information is likely to evoke biases that may harm the candidate’s application. Similarly, micro-aggressive descriptions are to be avoided (e.g. “surprisingly sharp” or self-evident characteristics), as is any information that links the candidate’s performance to their personal background. Writers should be aware that it is quite easy and, unfortunately, common to unknowingly seed doubt about a candidate.

Phrases to avoid:

- Stereotypical attributes (e.g., "activist," "not angry," "unique background")
- Micro-aggressive descriptions (e.g., "surprisingly sharp")
- Information linking performance to personal background (e.g., “as a mother”)
- Sentences starting with "although," "despite," or "however"
- Potentially negative language (e.g., "requires only minimal supervision")
- "Faint praise" (e.g., "candidate worked hard on cases")
- Calculatedly noncommittal statements (e.g., "responds well to feedback")
- Labeling the candidate's personality

Some adjectives that are meant to describe positive attributes of the candidate can evoke group stereotypes and unconscious negative bias in the reader. This diminishes the impression of a letter that is intended to be positive and supportive. Other adjectives are known to be effective in eliciting a positive opinion about the candidate. In any case, **the use of any adjectives should be contextualized**, including those recommended against but commonly used in our profession. That is, the writer should explain why the characteristics are important for the profession, preferably with an anecdote or specific example of this characteristic during their time with the candidate.

Adjectives that may evoke unconscious negative bias – use with context only:		Adjectives likely to elicit a positive opinion about the candidate – use for excellent candidates:	
caring	interpersonal	successful	resourceful
compassionate	warm	excellent	confident
helpful	meticulous	accomplished	ambitious
hard-working	thorough	outstanding	independent
conscientious	careful	skilled	intellectual
dependable	affectionate	knowledgeable	brilliant
diligent	nurturing	insightful	
dedicated	kind		
tactful			

Reviewing and Revising Letters

Utilizing bias-checking tools can significantly improve the quality of your letters. These tools help identify potentially problematic language that might introduce unconscious bias. Authors are strongly encouraged to use the bias calculator available at <https://slowe.github.io/genderbias/> before finalizing their letters.

After drafting your letter, take the following steps to review and revise for potential bias:

1. Read the letter aloud to catch any unintended tone or phrasing.
2. Ask a colleague to review the letter for potential biases.
3. Use the bias-checking tool.
4. Compare your letter to the examples provided in this guide.

Do's:

- Mention publications, including the quality of the research.
- Provide enough information in the letter to make it substantial.
- Use glowing language where appropriate.
- Mention accomplishments to show the candidate's abilities.
- Mention pertinent professional skills.
- Provide specific examples of the candidate's performance/interactions.
- Be consistent about calling all candidates Dr. X

Don'ts:

- Use average language where glowing language is appropriate.
- Mention the candidate's efforts to show their abilities.
- Mention irrelevant personal life details, such as background or irrelevant limitations.
- Seed doubt about the candidate's abilities/potential/trajectory. (Sentences starting with or including "although, despite, however"; use of potentially negative language such as "requires only minimal supervision" or "candidate is intolerant of low-quality patient care" or "not emotional")
- Use "faint praise" ("candidate worked hard on cases")
- Use calculatedly noncommittal or evasive statements ("candidate responds well to feedback")
- Label the candidate's personality ("typical international candidate", "rural work ethic", "blue-collar/white-collar work ethic", etc.)

Biased Paragraph Example 1:

"Minerva is a sweet and nurturing individual who gets along well with her colleagues. Despite her family commitments, she has shown dedication to her work. She is a team player and works well under the guidance of senior staff. While she can be emotional at times, Minerva has potential to grow in the field."

Improved Paragraph Example 1:

"Dr. Johnson has excelled in creating a positive work environment, resulting in her peers seeing her as leader. She has an outstanding work ethic, exemplified in her frequently helping other house officers with difficult cases. She is an exceptional team player who is able to work up even difficult cases independently, but who also asks for direction from her senior clinicians where necessary. In summary, she is an outstanding candidate who will one day make an accomplished surgeon."

Biased Paragraph Example 2:

“Minerva diligently practices surgical procedures and reads up on her cases. She has worked hard on researching minimally invasive surgical procedures, showing how dedicated she is. Students like her warm and caring attitude, and she rarely gets rattled despite a fairly high case load, making her a very desirable candidate for a residency program.”

Improved Paragraph Example 2:

"Dr. Johnson demonstrates exceptional surgical skills and a deep understanding of veterinary medicine. Dr. Johnson's research on minimally invasive surgical methods has been published in peer-reviewed journals, showcasing her commitment to advancing the field. Her leadership in mentoring students and ability to effectively manage high-stress situations make her an outstanding candidate for the residency program."

Resources – Bias in Reference Letters

Web links of interest

- Georgetown University, Center for Research and Fellowships – [Avoiding Bias in Recommendation Letters](#)
 - Or paste (<https://crf.georgetown.edu/avoiding-bias-in-recommendation-letters/#>)
- American Psychological Association, [Inclusive Language Guide](#) (pdf of guide in folder)
 - Or paste (<https://www.apa.org/about/apa/equity-diversity-inclusion/language-guidelines>)
- Inside Higher Education (IHE) [Defying a Gendered ‘Narrative’](#) (pdf of article in folder)
 - Or paste (<https://www.insidehighered.com/news/2022/03/09/study-challenges-gender-bias-letters-recommendation>)
- University of Arizona – [Avoiding gender bias in reference writing](#) (pdf in folder)
 - Or paste (https://csw.arizona.edu/sites/default/files/avoiding_gender_bias_in_letter_of_reference_writing.pdf?fbclid=IwAR3PhCJTQ3CLnaz4Gc5fbhyG0sJfSWt693yH2YUTpoaDkaVXhhDTYbtdnlQ)
- University of California, Merced - [Avoiding racial bias in letter of reference writing](#) (pdf in folder)
 - Or paste (<https://aaberhe.files.wordpress.com/2019/03/avoiding-racial-bias-in-reference-writing.pdf>)

Select peer-reviewed articles of interest

Turrentine FE, Dreisbach CN, St Ivany AR, Hanks JB, Schroen AT: Influence of Gender on Surgical Residency Applicant Recommendation Letters. <https://doi.org/10.1016/j.jamcollsurg.2018.12.020>

Trix F, Psenka C: Exploring the color of glass: letters of recommendation for female and male medical faculty. *Discourse & Society* 2003 Vol 14(2): 191–220.

Horwood C, McDermott S, Gennell T, Pawlik TM, Grignol VP, Hughes TM: Letters of recommendation for surgical fellowships e Does gender make a difference? <https://doi.org/10.1016/j.amjsurg.2020.06.036>

Powers A, Gerull KM, Rothman R, Klein SA, Wright RW, Dy CJ: Race- and Gender-Based Differences in Descriptions of Applicants in the Letters of Recommendation for Orthopaedic Surgery Residency <http://dx.doi.org/10.2106/JBJS.OA.20.00023>

Alexander CS: Text Mining for Bias: A Recommendation Letter Experiment. *Am Bus Law J* 2022 Vol 59(1): 5-59.

Botsford Morgan W, Elder KB, King EB: The emergence and reduction of bias in letters of recommendation. <https://doi.org/10.1111/jasp.12179>

Field NC, Pilitsis JG, Paul AR: The Role of Gender in Neurosurgical Residency Applicants' Letters of Recommendation. <https://doi.org/10.1093/neuros/nyab223>

DeZee KJ, Magee CD, Rickards G, et al.: What Aspects of Letters of Recommendation Predict Performance in Medical School? Findings From One Institution. <https://doi.org/10.1097/ACM.0000000000000425>

Sarabipour S, Hainer SJ, Furlong E, Jadavji NM, de Winde CM, Bielczyk N, Shah AP: Writing an effective and supportive recommendation letter. <https://doi.org/doi:10.1111/febs.15757>