Avoiding gender bias in reference writing

Got a great student? Planning to write a super letter of reference?
Don't fall into these common traps based on unconscious gender bias.

Mention research & publications

Letters of reference for men are 4x more likely to mention publications and twice as likely to have multiple references to research. Make sure you put these critical accomplishments in every letter!

Don't stop now!

On average, letters for men are 16% longer than letters for women and letters for women are 2.5x as likely to make a minimal assurance ('she can do the job') rather than a ringing endorsement ('she is the best for the job').

Emphasize accomplishments, not effort

Letters for reference for men are more likely to emphasize accomplishments ('his research', 'his skills', or 'his career') while letters for women are 50% more likely to include 'grind-stone' adjectives that describe effort. 'Hard-working' associates with effort, but not ability.

We all share bias

It is important to remember that unconscious gender bias isn't a male problem. Research shows that women are just a susceptible to these common pitfalls as men.
This is a problem for all of us - let's solve it together!

Keep it professional

Letters of reference for women are 7x more likely to mention personal life - something that is almost always irrelevant for the application. Also make sure you use formal titles and surnames for both men and women.

Stay away from stereotypes

Although they describe positive traits, adjectives like 'caring', 'compassionate', and 'helpful' are used more frequently in letters for women and can evoke gender stereotypes which can hurt a candidate. And be careful not to invoke these stereotypes directly ('she is not emotional').

Be careful raising doubt

We all want to write honest letters, but negative or irrelevant comments, such as 'challenging personality' or 'I have confidence that she will become better than average' are twice as common in letters for female applicants. Don't add doubt unless it is strictly necessary!

Adjectives to avoid:	Adjectives to include:
caring	successful
compassionate	excellent
hard-working	accomplished
conscientious	outstanding
dependable	skilled
diligent	knowlegeable
dedicated	insightful
tactful	resourceful
interpersonal	confident
warm	ambitious
helpful	independent
	intellectual

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Commission on the Status of Women

Research from Trix, F & Psenka, C. Exploring the color of glass: Letters of recommendation for female and male medical faculty. Discourse & Society, 2003; and Madera, JM, Hebl, MR, & Martin, RC. Gender and letters of Recommendation for Academia: Agentic and Communal Differences. Journal of Applied Psychology, 2009.

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www.csw.arizona.edu/LORbias

RUHS Department of Family Medicine – A Faculty Development Session

Letters of Recommendations: Are Yours (and Mine) Biased?

(Supplemental Handout: Monday, August 16, 2021 – Lawrence Loo, MD)

1) **General Recommendations**:[1]
   a) Generally one page with 3 – 4 paragraphs
   b) Have the right date, right name of the students (and accompanying identifying data – e.g. AAMC ID number), and right gender (especially if using templates)
   c) Check grammar
   d) Do *not* repeat what is already in the CV
   e) Address whether the applicant has access to the LOR via FERPA (Family Education Rights and Privacy Act)
   f) Check for "coded" language (see prior page)

2) **Opening Paragraph**:
   a) State what the applicant is applying for
   b) 1 – 2 sentences (*not* long paragraphs) of your title, how long have you known the applicant, and in what context have you known the applicant.
   c) 1 – 2 sentences about the context of your program

   Example:[2] Dear Internal Medicine Program Director:

   I am pleased to provide my recommendation for Dr. ____, who is applying for residency in Internal Medicine (IM). I am a physician at the Cleveland Clinic. I can speak to his qualifications from direct clinical observations and working with him during his IM rotation. In our medical school, students spend 4 weeks on an inpatient general IM rotation during their 3rd year where they see acute and chronic conditions, along with highly complex cases. Dr. _____ was on service with me for two weeks in January.

3) **"Second" (may be 2-3) Paragraph(s)**:
   a) What are the applicant's standouts – behavioral traits, interests, character, (? challenges)
   b) Offer clinical cues or *specific examples* (e.g. not just "hard-working"; rather "hard-working because she would often stay after clinic to make that extra phone call to her patients or complete her notes)
   c) Caution using "coded" language (see prior page). Be careful of *inadvertently* raising doubt (e.g. "continue to grow in . . ." "will develop . . ." or "I have confidence (s)he will become . . ."

4) **Third and Closing Paragraph**:
   a) Summary statement – Do not give the "highest recommendation" to everyone, especially if writing multiple LORs
   b) Caution using "coded" language (see prior page). Be careful of *inadvertently* raising doubt when writing "I urge you to call me" or "I encourage you to call me" versus "Feel free to call me" or "Happy to answer any questions you may have."

5) Seven Cardinal Elements of an Exemplary LOR:[3] **authentic** (based on adequate first-hand knowledge of the candidate); **honest** (accurate – avoding exaggeration or hyperbole); **explicit** (avoids veiled omissions); **balanced** (incorporates both strengths and weaknesses): **confidential** (avoiding unnecessary or unanticipated disclosures); of **appropriate detail and length** (content relevant to the institutional or individual requests0 and **technically clear** (avoidance of unnecessary abbreviations and/or jargon).

Selected References:

1) Wright SM, et.al.: Writing more informative letters of reference. J Gen Intern Med 2004;19:588-593.
2) Spencer A, et al.: The clinician educator's pen: set them up for success by becoming an expert letter of recommendation write. 2019 SGIM Annual Meeting (Workshop D03), Washington DC. May 8-11, 2019.
3) Larking GI, et. Al.: Ethics seminars: beyond authorship requirements – ethical consideration in writing letters of recommendation. Acad Emerg Med 2001;8:70-73.

Table 1. Recommendations from the Published Literature About How to Write Letters of Reference

Recommendations
Preparing to write the letter
• Address and send the letter only to individuals named by the trainee
• If you feel that you will be unable to write a favorable letter about the individual, you should inform him and give him the opportunity to decide if he prefers to ask someone else
• Commit enough, but not too much, time to the writing of the letter
• Remember the responsibility that you have to the profession of medicine
• Define whether you are writing a letter of *reference* (a genuine evaluation) or a letter of *recommendation* (a commentary only on strengths of an individual; weaknesses that have been identified are purposefully omitted)
• Consider meeting with the individual requesting the letter to review the person's career goals and other aspects that are important in order to create an honest picture of the candidate. Meeting with the individual can also serve to refresh one's memory about specific experiences that have occurred with the person and about their performance and character
Writing the letter
• Maintain a formal approach in the formatting of the letter
• Choose your words carefully
• Use common sense
• Keep in mind that honesty and authenticity are paramount
• Use specific, objective data when possible and supplement that with interpretations or explanations
• Provide the information that you would want to know if you were on the receiving end of the letter
• Confer concerns and weaknesses explicitly
• Keep it short and clear
• Make sure that the information shared reflects fairness and good faith
• Be certain to discuss the skills or characteristics that are most relevant and germane. These frequently include many of the following: personal qualities (especially integrity and motivation), professionalism, communication skills, relations with others, clinical competence, medical knowledge, technical skill, administrative ability
• Offer for the recipient to call you if clarification of any of the content is needed
Before sending the letter
• Critically read the letter with careful appraisal of the language used and the information that has been disclosed

Writing More Informative Letters of Reference
Scott M. Wright, MD, Roy C. Ziegelstein, MD
J GEN INTERN MED 2004;19:588–593

TABLE
Key Letter of Recommendation (LOR) Components

Letter Element	Recommendation	Examples
Introductory paragraph: elements to include	• The title of the position under consideration • How strongly you recommend this person • How you know this person and duration—context of how the relationship developed (eg, review of evaluations, close personal clinical contact, shared committee work)	• Highly recommend with no hesitation/reservations • I am pleased to support Dr "X" for the position of "Y" • I have worked with Dr "X" in the following capacity(ies) . . .
Body of letter: be specific in describing candidate's attributes and abilities	• Actions in clinic, research, or education (eg, comments from other attendings, patients, peers, or examples of praiseworthy actions) • Professional attributes (eg, exceptional work ethic, trustworthiness, team player, professionalism)[2] • General intellectual and technical ability, character strengths, motivation, and overall "fitness" for position • Place the candidate in context, in terms of your program or other candidates	• Dr "X" easily meets all job qualifications . . . exceeding them in 3 areas I will highlight . . . • Dr X's specific strengths are in areas of . . . • Compared with other residents at this level . . .
Summary	• Include a short summary, typically 1 sentence, of your comments at the end • Use modifiers to distinguish level of recommendation • Invite further inquiry, for additional information or question	• Unreserved highest (versus strongest) recommendation • Asset to program • Candidate has my support to pursue . . . • Please contact me . . .
Signature	• Include your professional title(s) and specific contact information	
Review	• Carefully proof the LOR and review the message from the reference point of the LOR recipient • Be alert to inadvertent gender bias[3] or other biases	

Pediatric, Surgery, and Internal Medicine Program Director Interpretation of Letters of Recommendation

(Saudek K, Treat R, Goldblatt M, et. al.: Acad Med 2019;94:S64-S68)

Table 1
Letter Features Rated Important by PDs From Pediatrics, Surgery, and IM

	Median (% rated important)			Effect size (Cliff d)		
Letter feature	Peds PDs	Surgery PDs	IM PDs	Peds vs surgery	Peds vs IM	Surgery vs IM
Description of depth of interaction with applicant	5 (95)	5 (90)	5 (96)	0.05	0.04	0.01
Description of specific behavior traits of the applicant	5 (95)	4 (90)	5 (95)	0.14	0.01	0.12
Description of the applicant's abilities	4 (94)	4 (87)	4 (90)	0.13	0.08	0.07
Summative statement on strength of recommendation	4 (83)	5 (95)	5 (90)	0.26[a]	0.18[a]	0.09
Inclusion of personal stories about the applicant	4 (63)	4 (52)	4 (66)	0.13	0.03	0.15
Involvement in program/hospital activities	3 (49)	3 (33)	4 (50)	0.19[a]	0.03	0.20[a]
Competency-based framework	3 (41)	3 (36)	3 (48)	0.09	0.08	0.15
Academic rank of letter writer	3 (40)	4 (61)	3 (40)	0.22[a]	0.02	0.23[a]
Involvement in community service activities	3 (40)	3 (20)	3 (42)	0.27[a]	0.01	0.25[a]
Short, concise letter ≤ 3 paragraphs	3 (39)	4 (53)	3 (39)	0.14	0.05	0.11
Participation in research	3 (31)	3 (28)	3 (16)	0.03	0.16	0.13
Long, descriptive letter ≥ 4 paragraphs	3 (21)	3 (26)	3 (31)	0.08	0.20[a]	0.11
Advanced degrees held by applicant (PhD, MPH, etc.)	3 (20)	3 (14)	3 (16)	0.12	0.12	0.01

Abbreviations: PD indicates program director; IM, internal medicine.
[a]Statistically significant differences ($P < .004 = .050/13$) after Bonferroni correction.

Table 3

Correlation Between Letter Phrases: Pediatric PDs[a]

Letter phrase	Positive	Neutral	Negative	Mean Likert score (SD)
Would like the applicant to stay at our institution	**0.70**	−0.11	0.11	
Will be an asset to any program	**0.68**	0.16	0.01	
Exceeded expectations	**0.66**	0.10	0.28	**4.3 (0.4)**
I give my highest recommendation	**0.63**	0.28	−0.27	
I highly recommend	**0.57**	0.56	0.56	
I recommend	0.04	**0.78**	0.15	
I recommend without reservation	0.43	**0.68**	0.02	**3.1 (0.6)**
Solid performance	0.06	**0.66**	0.24	
Showed improvement	−0.07	0.20	**0.77**	
Overcame personal setbacks	−0.25	0.01	**0.73**	**2.6 (0.6)**
Performed at expected level	−0.07	0.43	**0.49**	

Abbreviation: PD indicates program director.
[a]Bold formatting indicates $P < .001$.

Table 4

Correlation Between Letter Phrases: Surgery PDs[a]

Letter phrase	Positive	Positive	Neutral	Negative	Mean Likert score (SD)
Would rate them in the top 1%–5% of students I have worked with	**0.88**	0.14	0.12	−0.02	
I would rate them in the top 6%–25% of students I have worked with	**0.60**	0.08	−0.35	0.45	**4.3 (0.6)**
Exceeded expectations	0.27	**0.69**	0.14	−0.01	
Would like the applicant to stay at our institution	−0.15	**0.60**	0.29	0.10	**4.3 (0.5)**
I recommend without reservation	0.01	−0.07	**0.79**	0.12	
I give my highest recommendation	−0.28	0.25	**0.73**	−0.02	
I highly recommend	−0.02	0.36	**0.72**	0.06	**3.1 (0.6)**
I recommend	0.24	0.04	**0.62**	−0.03	
Will be an asset to any program	0.29	−0.04	**0.61**	0.01	
Performed at expected level	0.06	0.07	0.20	**0.73**	
Showed improvement	0.07	−0.02	0.12	**0.70**	
Overcame personal setbacks	0.08	−0.09	0.08	**0.62**	**2.6 (0.6)**
I would rate them in the top 26%–50% of students I have worked with	0.01	0.40	−0.39	**0.61**	
Solid performance	0.48	−0.07	0.14	**0.50**	

Abbreviation: PD indicates program director.
[a]Bold formatting indicates $P < .001$.

Table 5

Correlation Between Letter Phrases: Internal Medicine PDs[a]

Letter phrase	Positive	Positive	Neutral	Negative	Mean Likert score (SD)
I recommend without reservation	**0.77**	0.13	−0.20	−0.09	
I highly recommend	**0.68**	0.09	0.33	−0.14	
I give my highest recommendation	**0.67**	−0.12	0.40	0.21	**4.0 (0.5)**
Will be an asset to any program	**0.64**	0.21	−0.05	0.31	
Exceeded expectations	**0.47**	0.27	0.10	0.44	
I would rate them in the top 1%–5% of students I have worked with	−0.03	**0.71**	0.12	0.03	
I would rate them in the top 6%–25% of students I have worked with	0.44	**0.66**	−0.11	−0.11	**3.9 (0.5)**
I would rate them in the top 26%–50% of students I have worked with	−0.25	**0.53**	0.04	0.46	
Would like the applicant to stay at our institution	0.12	0.06	**0.81**	−0.06	**3.6 (0.5)**
I recommend	0.29	0.45	**0.50**	−0.19	
Showed improvement	0.03	−0.08	−0.02	**0.81**	
Performed at expected level	0.14	0.21	−0.13	**0.72**	
Overcame personal setbacks	0.10	−0.19	0.14	**0.69**	**2.6 (0.6)**
Solid performance	0.24	0.12	0.13	**0.57**	

Abbreviation: PD indicates program director.
[a]Bold formatting indicates $P < .001$.

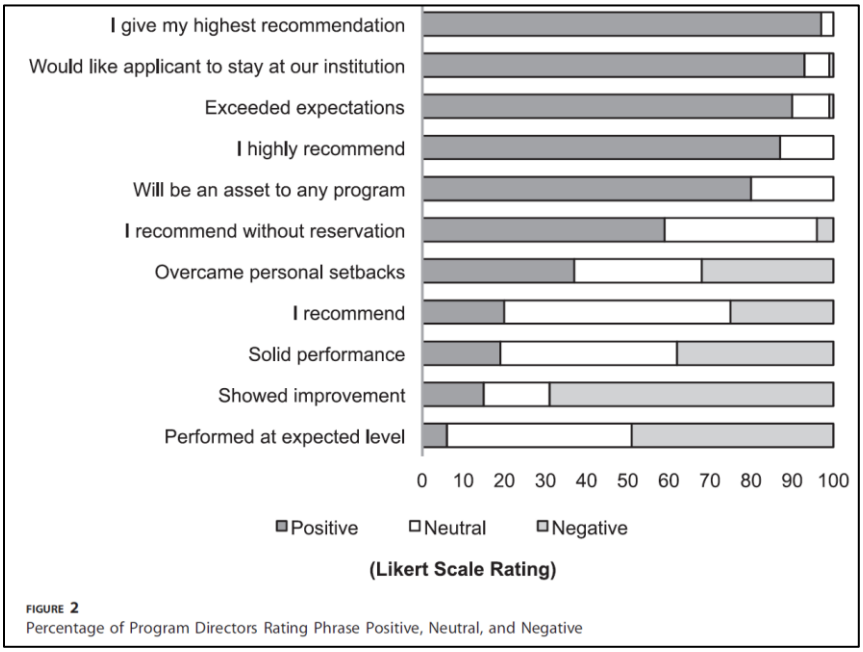

FIGURE 2
Percentage of Program Directors Rating Phrase Positive, Neutral, and Negative

Table 4 Categorization of descriptors by personal attribute vs. competency

a. Personal attribute descriptors

Active	Enthusiastic	Poised
Affable	Fabulous	Polite
Assertive	Humble	Relaxed
Bright	Intelligent	Reliable
Caring	Interesting	Respectful
Cheerful	Lovely	Sharp
Clear	Mature	Social
Considerate	Modest	Sophisticated
Delightful	Motivated	Talented
Earnest	Nice	Thoughtful
Easy-going	Open	Warm
Energetic	Pleasant	Wonderful

b. Competency-related descriptors

Advanced	Impressive
Basic	Integral
Clinical	Knowledgeable
Compassionate	Medical
Complex	Relevant
Comprehensive	Scientific
Conscientious	Smart
Efficient	Superior
Empathic	Thorough
Excellent	

Study-Defined Dimension Dictionaries

Standout words: excellen*, superb, outstanding, unique, exceptional, unparalleled, *est, most, wonderful, terrific*, fabulous, magnificent, remarkable, estraordinar*, amazing, supreme*, unmatched

Ability words: talent*, intell*, smart*, skill*, ability, genius, brilliant*, bright*, brain*, aptitude, gift*, capacity, propensity, innate, flair, knack, clever*, expert*, proficient*, capable, adept*, able, competent, natural*, inherent*, instinct*, adroit*, creative*, insight*, analytical

Grindstone words: hardworking, conscientious, depend*, meticulous, thorough, diligen*, dedicate, careful, reliab*, effort*, assiduous, trust*, responsib*, methodical, industrious, busy, work*, persist*, organiz*, disciplined

Teaching words: teach, instruct, educat*, train*, mentor, supervis*, adviser, counselor, syllabus, syllabus, course*, class, service, colleague, citizen, communicate*, lectur*, student*, present*, rapport

Research words: research*, data, study, studies, experiment*, scholarship, test*, result*, finding*, publication*, publish*, vita*, method*, scien*, grant*, fund*, manuscript*, project*, journal*, theor*, discover*, contribution*

Note. * indicates that any word containing the letter string that precedes or follows the asterisk should be counted.

Resource: **Gender Bias Calculator** (Thomas Forth) @ https://www.tomforth.co.uk/genderbias/

Table Sources & Additional Resources:

1) Saudek K, Treat R, Goldblatt M, et. al.: Pediatric, Surgery, and Internal Medicine Program Director Interpretations of Letters of Recommendation. Acad Med 2019;94:S64-S68.
2) Saudek K, Saudek D, Treat R, Bartz P, Weigert R, Weisgerber M. Dear Program Director: Deciphering Letters of Recommendation. J Grad Med Educ. 2018 Jun;10:261-266.
3) Rojek AE, Khanna R, Yim JWL, Gardner R, Lisker S, Hauer KE, Lucey C, Sarkar U. Differences in Narrative Language in Evaluations of Medical Students by Gender and Under-represented Minority Status. J Gen Intern Med. 2019 May;34:684-691.
4) Williams JC, Mihaylo S: How the best bosses interrupt bias on their teams. Strategies to foster equity and inclusion. Harvard Business Review. Nov-Dec 2019;97:151-155.
5) Schmader T, Whitehead J, Wysocki VH. A Linguistic Comparison of Letters of Recommendation for Male and Female Chemistry and Biochemistry Job Applicants. Sex Roles. 2007;57:509-514.