

# Defining the Ideal Qualities of Mentorship: A Qualitative Analysis of the Characteristics of Outstanding Mentors

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## ABSTRACT

**OBJECTIVE:** The study's objective was to identify the important qualities of outstanding mentors as described by their mentees' letters of nomination for a prestigious lifetime achievement award in mentorship.

**METHODS:** The Lifetime Achievement in Mentorship Award at the University of California, San Francisco, recognizes a faculty member who has demonstrated sustained mentoring excellence in the academic health sciences. Recommendation letters in support of the top 10 nominees in 2008 (n = 53 letters) were analyzed using grounded theory and constant comparative technique until thematic saturation was achieved.

**RESULTS:** In 2008, 29 faculty members (of >1000 eligible senior faculty) were nominated. Nominees were 53 to 78 years old, and 30% were women. The nominees represented 4 schools (Medicine, Nursing, Pharmacy and Dentistry) and 22 departments/divisions. Five themes emerged from the analysis. Outstanding mentors: 1) exhibit admirable personal qualities, including enthusiasm, compassion, and selflessness; 2) act as a career guide, offering a vision but purposefully tailoring support to each mentee; 3) make strong time commitments with regular, frequent, and high-quality meetings; 4) support personal/professional balance; and 5) leave a legacy of how to be a good mentor through role modeling and instituting policies that set global expectations and standards for mentorship.

**CONCLUSION:** This is the first study to describe the qualities of admired mentors by analyzing nomination letters for a prestigious mentoring award. Our results give new insight into how mentors foster the careers of junior faculty in the academic health sciences. The results can guide academic leaders on how to train and evaluate mentors.

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**KEYWORDS:** Academic medical centers; Faculty; Mentees; Mentors; Program development

Mentorship is a critical component of success in the academic health sciences. Faculty and trainees who identify mentors are more likely to be promoted,<sup>1-4</sup> are more productive,<sup>5-8</sup> and publish more often.<sup>4,7,9,10</sup> During their career, mentored physicians are more likely to obtain grant support,<sup>10-12</sup> have higher retention at their academic insti-

tution,<sup>3,12,13</sup> and report greater self-efficacy<sup>7,11,12,14-16</sup> and improved career satisfaction.<sup>9,11</sup> As a result, an increasing number of health sciences institutions have invested in formal mentoring programs for their faculty and trainees, and some have made participation in mentoring a requirement for advancement and promotion of faculty members.<sup>16</sup>

Despite the growth of mentoring programs nationally and the increased emphasis on mentor training, there is little empirical research on the correlates of effective mentoring relationships or the characteristics of outstanding mentors. An analysis of mentored faculty identified specific qualities associated with successful mentoring, including personal communication, professional guidance, and professional development.<sup>17</sup> A recent systematic review of the literature categorized desired mentor characteristics into 3 dimensions: per-

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sonal, relational, and professional,<sup>18</sup> which helps frame a general discussion about mentoring but reveals an absence in the literature of a qualitative description from the mentees of mentors who have been recognized as outstanding. In this context, our aim was to identify the key characteristics of outstanding mentors from the perspectives of their mentees.

## MATERIALS AND METHODS

### Study Population

The University of California, San Francisco (UCSF), established a faculty mentoring program in 2006 to support the recruitment and retention of faculty, to increase diversity through improved mentoring of underrepresented faculty, and to improve faculty career satisfaction and success.<sup>16</sup> In 2007, the first Lifetime Achievement in Mentoring Award was established to recognize senior faculty members who demonstrate long-term commitment to and excellence in faculty mentoring in the academic health sciences. Letters of nomination were submitted by mentees to describe specific qualities of the mentor that merit recognition and specific contribution to the mentee's career development.

To be eligible for the award, nominees must have had a minimum of 10 years of service at UCSF, been at an Associate Professor level or above, had a 51% appointment or greater at UCSF, and made significant contributions to his or her mentee's career. An award selection committee, composed of 9 senior faculty members, was convened to choose the winner. Finalists for the award were identified on the basis of the following criteria: impact on the career development of their mentees, productivity of their mentees, overall breadth and depth of their mentorship activities, and quality of the letters of nomination. We included all letters of nomination for each of the 10 finalists for the award. Finalists were chosen for analysis to identify the best mentors at UCSF. Each finalist had 4 to 6 letters of recommendation for a total of 53 letters in our database. All identifying information from the documents was removed by a third party, and analysis was conducted on these deidentified letters.

### Data Analysis

The letters were analyzed using a grounded theory approach.<sup>19</sup> Initial independent review of 53 nomination letters by 2 investigators (CSC, RAR) was used to create an open coding list. By using the list, a second independent review of all letters was repeated by 2 investigators (CSC, RAR), applying the open coding list to all 53 letters. The-

matic saturation was achieved after 43 letters. Discrepancies in coding were discussed and resolved. A third investigator (MDF) checked the coded letters for accuracy. This study qualified for exemption by the UCSF Committee on Human Research.

## CLINICAL SIGNIFICANCE

- Nominees for a Lifetime Achievement Award exemplify ideal mentorship; qualitative analysis of their mentees' recommendation letters offers rich, descriptive insight into their outstanding qualities.
- Outstanding mentors exhibit admirable personal qualities, act as career guides, make strong time commitments, support personal/professional balance, and leave a legacy of mentoring.
- Identified themes can be used to build mentor training programs and can serve as a benchmark for mentor feedback and evaluation.

## RESULTS

### Demographics

Twenty-nine faculty members (of >1000 eligible faculty at the Associate Professor rank or higher) were nominated for the Lifetime Achievement in Mentoring Award by their mentees in 2008. Sixty-two percent of the mentees who submitted letters were women, and most mentees (75%) were currently at UCSF. The faculty mentors nominated for the award ranged in age from 53 to 78 years, and 30% were women. The mentors represented all 4 schools at UCSF (Medicine, Nursing, Pharmacy, and Dentistry) and represented 22 departments/divisions within these schools. Academic rank of the mentees were Professor (40%), Associate Pro-

fessor (15%), Assistant Professor (30%), and other (15%).

### Characteristics of Outstanding Mentors: Five Themes

Five themes emerged from the analysis of the letters of recommendation in support of these outstanding mentors: 1) admirable characteristics, 2) how mentors act as career guides, 3) strength of mentor's time commitment, 4) support of personal/professional balance, and 5) leaving a legacy of mentoring.

**Theme 1: Admirable Characteristics.** Mentees described the characteristics and qualities of their outstanding mentors in a variety of ways (**Table 1**). These characteristics fell into 2 descriptive categories: 1) *personal* qualities that lie at the core of the mentor's identity and 2) *professional* traits that relate to success in work-related activities.

Admirable personal qualities included descriptions of outgoing and interactive personalities (*brilliant, engaging, enthusiastic, inspiring, passionate, warm*), kindness (*caring, compassionate, generous, gentle, empathic*), and justness (*ethical, fair, honest*). The words that were most commonly used to describe these outstanding mentors' personalities included compassionate, enthusiastic, generous, honest, insightful, selfless, and wise. In particular, selflessness was a prevalent description of mentors:

**Table 1** Admirable Characteristics of Outstanding Mentors

<u>Personal</u>
Brilliant
Calm
Caring
<b>Compassionate</b>
Empathic
Engaging
<b>Enthusiastic</b>
Ethical
Fair
<b>Generous</b>
Gentle
<b>Honest</b>
Humble
Humorous
<b>Insightful</b>
Inspiring
Loyal
Optimistic
Passionate
Respectful
<b>Selfless</b>
Warm
<b>Wise</b>
<u>Professional</u>
Accessible
Articulate
<b>Collaborative</b>
Collegial
Communicative (verbal and written)
Comprehensive
<b>Intellectual</b>
Knowledgeable
Love of research and science
<b>Skilled clinician</b>
Skilled diagnostician
Talented
<b>Teacher</b>
Unconditional
Visionary

\*More common words in bold.

*“Equally impressive is the selflessness that [she] brings to her mentorship. She makes little distinction between projects on which she is or is not a co-author, or between fellows or faculty with whom she has a close or distant mentoring relationship for research. . .for example, she has without hesitation provided me many hours of thoughtful advice on my papers and grants from which she will receive no professional recognition or benefit.”*

Mentees also gave high praise to their mentors for characteristics that describe their professional skills (Table 1). The most common descriptions included collaborative, intellectual, skilled clinician, and teacher. As one mentee wrote,

*“He is an outstanding clinician and scientist, and a wonderful teacher. These qualities are, of course, essential in a mentor because if the skills are not there they cannot be passed on to others.”*

**Theme 2: How Mentors Guide Their Mentees’ Careers.**

*“[He] was like a Solid Rocket Booster, ensuring that I achieved the lift and trajectory necessary to make it into orbit. But rather than dropping off at that point, he has remained a constant feature in my life, much like Mission control, monitoring my progress, offering incredibly helpful advice on a regular basis, and serving as a sounding board, editor, or strategist, depending on what I needed.”*

Mentees wrote in great detail about the ways in which their mentors offered guidance and support. Table 2 contains a full list of these actions. Mentees described how their mentors offered a vision and guided them in a purposeful but unobtrusive manner. Through this, mentors were able to identify their mentees’ potential, set high standards, and provide a vision. One mentee summarized this by writing the following:

*“[He] continues to accurately assess my skills, knowledge, and attitudes, and to challenge me to seek higher personal achievement than I would on my own. So, [he] is*

**Table 2** How Mentors Guide Their Mentees’ Careers

Creating a Plan
Identify mentee’s potential
See big picture
Give a vision
Set high standards
Help to create and prioritize a plan
Offer unique perspective
Tailor to Individual Mentee
Assess who the person is and how best to serve him/her
Help mentees find their own way (“leading not directing”)
Draw out best in mentee
Allow mentee to fail
Provide Wide Breadth of Opportunities
Introduce to key contacts/collaborators
Attention to mentees’ promotion
Give recognition
eg, paper authorship, committees, conferences, organizations
Put mentees’ careers before their own
Concrete Activities
Planning and carrying out studies
Grant writing
Analyzing results, teach to think critically
Read, give feedback, and revise manuscripts
Advise on preparing presentations
Material support (salary, research funds)
Curriculum vitae preparation
Communication
Open and 2-way
Frank with opinions

**Table 3** Example Quotes Describing Mentors' Strong Commitment of Time

Frequency

*"[My mentor] and I have a regularly scheduled meeting for 1 hour each week."*

*"She makes it her priority to be available for meetings on a regular basis, and goes out of her way to adjust her schedule if her attention is needed urgently."*

Availability

*"[He] is always accessible to anyone who sought him out for help. He had an open-door policy. Even though he was extremely busy, he always found time to talk with me."*

*"Despite the multitude of responsibilities he had, there was never a time he was too busy to meet with me regardless of how trivial the matter may be that concerned me."*

Duration

*"In addition, during the 25 years since I left UCSF, [he] has stayed in touch with me providing . . . support and guidance."*

Quality

*"As busy as his days are, I always feel as though my career and concerns are the only thing on [his] mind during our regular meetings."*

*"He is extraordinarily committed to his mentees, not only in the time that he devotes to them but in the focus and attention with which he uses that time . . . he is deeply present and focused [during] our interaction."*

*an outstanding mentor because he saw what I could become."*

Once the mentees' needs were assessed, mentors provided support where it was needed:

*"He knows what each plant in his garden needs to thrive: this one a little more sun, this one more fertilizer, this one more water . . . I think this is a good metaphor for his mentoring. He takes the same careful approach with 'growing' his fellows and takes great joy in watching them bloom when mature."*

Mentors balanced this nurturance with a hands-off approach that could be described as guided independence, providing support at key moments but relinquishing ultimate control to their mentees. One mentee wrote, *"As a mentor, [he] provided direction and opportunity, allowing me to chart my own path, but at the same time guiding me along the way."*

Many mentees described crucial guidance when developing professional contacts and providing key academic opportunities that enhanced their profile within the local, national, and international stage. Finally, mentees detailed the various concrete activities that mentors afforded toward research, writing, material support, and communication.

**Theme 3: Strength Of Time Commitment.** The strength of the commitment that mentors shared with their mentees is the third theme in these successful relationships. There are

4 aspects of the relationships that made the time commitments strong: the frequency, availability, duration, and quality. For example, one mentee wrote, *"[He] is always accessible to anyone who sought him out for help. He had an open-door policy. Even though he was extremely busy, he always found time to talk with me."* **Table 3** contains representative quotes from the mentees for each of these subthemes.

Mentees appreciated frequent and regular contact with their mentors. This included both scheduled, recurring meetings and an open-door policy for issues that came up along the way. Mentors described how their mentors' availability was crucial in the success of the relationship. The longevity of outstanding mentors' relationships with their mentees was commented on in many of the mentee letters. The conclusion of a research project or training period did not mark the end of mentor-mentee relationships. Mentors often provided guidance over decades despite changes in area of research or a move to a new academic institution. Finally, the quality of the time that mentors gave to their mentees was of equal or more value than the quantity.

**Theme 4: Support For Personal/Professional Balance.** Although the primary purpose of the mentor-mentee relationship focused on providing support to maximize success in an academic career, the integration of personal life by mentors emerged as an important fourth theme. The most admired mentors understood that a key aspect of being a successful faculty member was to strive for balance between one's professional and personal life. Mentees looked to their mentors as role models for how to integrate personal life with professional work. Successful mentors provided guidance on leading a fulfilled life at home; in addition, mentors offered support to mentees during periods of stress or personal struggle. **Table 4** lists examples of quotes regarding this theme, but may be summarized by the mentee who wrote:

**Table 4** Example Quotes Describing Mentors' Support of Professional/Personal Balance

*"He has shown exceptional mentoring to trainees in their growth and development not only toward scientific or clinical career development but also in personal areas of growth, such as child rearing or balancing family with work."*

*"Through our discussions regarding life and how to maintain balance and perspective. [He] has always stressed that a career is only one aspect of life and that family and friends should always take precedent over anything professional."*

*"I feel his true gift as a mentor was serving as a role model for how to live life. [He] always has a Zen-like balance about him. Between endless meetings, his lunch-time jog, and taking frequent calls from his daughters, [he] always found time to give to his colleagues, residents, and students. It speaks volumes about [him] that on more than one occasion my fellow residents told me that they sought out [his] advice in times of distress."*

*“He has his door open and welcomes dialogue about patient care, research or the challenges of balancing family with work, raising children, and marriage. He truly supports those whom he mentors in all aspects of life!”*

**Theme 5: Legacy Of Mentoring.** The final theme is the legacy of mentoring created by outstanding mentors when their mentees become future generations of mentors. Most of the faculty who wrote letters of nomination for this award were at the Associate Professor rank or higher. Mentees reflected on their experience being mentored and how it shaped their own skills as mentors. Many letters of nomination described this transition. For example, “[He] provided the example that I attempt to emulate as I begin to mentor my own students, fellows, and junior faculty.” Through this role modeling and direct teaching, mentees described how mentors created an exponential legacy of mentoring. In addition, mentees described how their mentors acted as a direct guide and helped the mentee when it came time for them to become a mentor.

Many mentors also affected mentorship by influencing other faculty members. Some created an expectation and culture of supportive mentoring within their divisions, whereas others instituted mentoring policies to foster improved mentoring. Mentees described multiple ways in which mentors changed the environment to value and be more conducive to mentorship. For example, one mentee wrote,

*“(He) created a culture in the Division of X that parallels the tremendous skills he brings to his one-on-one mentorships. Through his leadership, program development, and role modeling, the division is infused with a spirit of collaboration with and dedication to one’s peers.”*

## DISCUSSION

In the process of identifying the qualities of outstanding mentors, we focused on the perspective of a key stakeholder in the mentoring relationship—the mentee. Mentors who were nominated for a prestigious lifetime achievement in mentoring award exemplify the ideal qualities of mentorship. The letters of recommendation that their mentees wrote offer a unique and rich descriptive view into how their mentors have successfully provided support and guidance to achieve professional and personal success in the academic health sciences.

Five themes on the ideal qualities of mentorship emerged from our analysis: 1) *admirable characteristics* of mentors, 2) how mentors serve as *career guides*, 3) strength of *time commitments*, 4) support for mentee’s *personal/professional balance*, and 5) leaving behind a *legacy of mentoring*. Although there has been burgeoning interest in mentorship in the health sciences over the past few years, little progress has been made in identifying the key characteristics of outstanding mentors, and there is a gap in translating this knowledge into mentor training programs.<sup>20-22</sup> By identifying characteristics of outstand-

ing mentors, these results may help to inform mentor development programs and address this key gap. Schools of medicine and others in the academic health sciences face challenges in the recruitment and retention of new faculty,<sup>23</sup> making the need for optimization of mentor training even more critical. In studies outside the academic health sciences, high-quality formal mentorship programs were associated with outcomes of job satisfaction and career success.<sup>24</sup> The 5 themes identified provide a guide for how to frame mentor training programs and can serve as a benchmark for mentor feedback and evaluation.

It is notable that 62% of mentees who submitted nomination letters were women, whereas only 30% of the outstanding mentor finalists were women. At UCSF, 44% of faculty members are women and only 32.5% were women eligible for the lifetime achievement award (based on rank). This mirrors the 30% of women nominated for the award. The discrepancy in percentage of women writing letters of recommendation compared with the actual nominations reflects the shifting gender demographics of the UCSF faculty because 55% of assistant professors are women. It is also possible that women faculty members were more appreciative of their mentors and more likely to nominate them because they experienced more difficulty finding supportive mentors.

The theme “legacy of mentoring” that outstanding mentors model for their mentees is one that, to our knowledge, has not been described previously in the literature on faculty mentoring in academic medicine. It is not only a novel theme but also an important finding to help motivate mentorship and its training. Mentors can gain satisfaction in knowing that their mentorship activities will not only affect their mentees but also affect future generations of health science academicians. Role modeling and teaching mentorship skills for mentees to become future mentors make mentorship self-sustaining; by encouraging mentors to affect the future of mentorship, the field becomes stronger.

Our findings should be interpreted in the context of their limitations. Participants were based at one institution. Given the qualitative nature of these data, it is not possible to calculate the relative frequency of these behaviors or rank their relative impact on mentees’ careers. In addition, the letters of nomination focus on positive mentoring experiences and may lack relevant information that could be obtained by analyzing poor mentorship relationships. Finally, these letters focus on academic faculty, and it is unclear whether the findings can be applied to mentorship of medical students or physicians in training. Despite these limitations, several strengths of the study include the representation of a diverse population within the academic health sciences (multiple health disciplines and numerous departments and divisions within medicine), a unique population of outstanding mentors, and detailed descriptions by mentees of their mentors’ strengths and actions.

## CONCLUSIONS

Our findings identify qualities of outstanding mentors from the most important judge: their mentee. Future directions could include creation and evaluation of mentorship training based on the qualitative themes identified. Similar studies at different institutions or with different mentee populations may also broaden the scope of these findings.

## References

1. Beasley BW, Simon SD, Wright SM. A time to be promoted. The Prospective Study of Promotion in Academia (Prospective Study of Promotion in Academia). *J Gen Intern Med.* 2006;21:123-129.
2. Emans SJ, Goldberg CT, Milstein ME, Dobriner J. Creating a faculty development office in an academic pediatric hospital: challenges and successes. *Pediatrics.* 2008;121:390-401.
3. Kosoko-Lasaki O, Sonnino RE, Voytko ML. Mentoring for women and underrepresented minority faculty and students: experience at two institutions of higher education. *J Natl Med Assoc.* 2006;98:1449-1459.
4. Sambunjak D, Straus SE, Marusic A. Mentoring in academic medicine: a systematic review. *JAMA.* 2006;296:1103-1115.
5. Barker ER. Mentoring—a complex relationship. *J Am Acad Nurse Pract.* 2006;18:56-61.
6. Rabatin JS, Lipkin M Jr, Rubin AS, Schachter A, Nathan M, Kalet A. A year of mentoring in academic medicine: case report and qualitative analysis of fifteen hours of meetings between a junior and senior faculty member. *J Gen Intern Med.* 2004;19(5 Pt 2):569-573.
7. Thorndyke LE, Gusic ME, George JH, Quillen DA, Milner RJ. Empowering junior faculty: Penn State's faculty development and mentoring program. *Acad Med.* 2006;81:668-673.
8. Chew LD, Watanabe JM, Buchwald D, Lessler DS. Junior faculty's perspectives on mentoring. *Acad Med.* 2003;78:652.
9. Ramanan RA, Taylor WC, Davis RB, Phillips RS. Mentoring matters. Mentoring and career preparation in internal medicine residency training. *J Gen Intern Med.* 2006;21:340-345.
10. Steiner JF, Lanphear BP, Curtis P, Vu KO. Indicators of early research productivity among primary care fellows. *J Gen Intern Med.* 2002;17:854-860.
11. Palepu A, Friedman RH, Barnett RC, et al. Junior faculty members' mentoring relationships and their professional development in US medical schools. *Acad Med.* 1998;73:318-323.
12. Zeind CS, Zdanowicz M, MacDonald K, Parkhurst C, King C, Wizwer P. Developing a sustainable faculty mentoring program. *Am J Pharm Educ.* 2005;69:100-106.
13. Wingard DL, Garman KA, Reznik V. Facilitating faculty success: outcomes and cost benefit of the UCSD National Center of Leadership in Academic Medicine. *Acad Med.* 2004;79(10 Suppl):S9-S11.
14. Tracy EE, Jagsi R, Starr R, Tarbell NJ. Outcomes of a pilot faculty mentoring program. *Am J Obstet Gynecol.* 2004;191:1846-1850.
15. Morzinski JA, Diehr S, Bower DJ, Simpson DE. A descriptive, cross-sectional study of formal mentoring for faculty. *Fam Med.* 1996;28:434-438.
16. Feldman MD, Areal PA, Marshall SJ, Lovett M, O'Sullivan PO. Does mentoring matter? results from a survey of faculty mentees at a large health sciences university. *Med Educ Online.* 2010 Apr 23;15. doi: 10.3402/meo.v15i0.5063.
17. Ramanan RA, Phillips RS, Davis RB, Silen W, Reede JY. Mentoring in medicine: keys to satisfaction. *Am J Med.* 2002;112:336-341.
18. Sambunjak D, Straus SE, Marusic A. A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. 2009. *J Gen Intern Med.* 2009;25:72-78.
19. Strauss A, Corbin J. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.* Thousand Oaks, CA: Sage Publications; 1998.
20. Duda RB. Mentorship in academic medicine: a critical component for all faculty and academic advancement. *Curr Surg.* 2004;61:325-327.
21. Johnson JC, Williams B, Jayadevappa R. Mentoring program for minority faculty at the University of Pennsylvania School of Medicine. *Acad Med.* 1999;74:376-379.
22. Koopman RJ, Thiedke CC. Views of family medicine department chairs about mentoring junior faculty. *Med Teach.* 2005;27:734-737.
23. Schrubbe KF. Mentorship: a critical component for professional growth and academic success. *J Dent Educ.* 2004;68:324-328.
24. Allen TD, Eby LT, Lentz E. Mentorship behaviors and mentorship quality associated with formal mentoring programs: closing the gap between research and practice. *J Appl Psychol.* 2006;91:567-578.