

Identifying the Motivations, Barriers, and Factors Associated with Mentoring among Academic Physicians

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Mentoring is crucial for career advancement and retention of physicians. Understanding factors, motivations, and challenges associated with mentoring can help facilitate physician mentoring at academic institutions. This report examined characteristics of physicians associated with mentoring more, identified the motivations for physicians to mentor, and revealed obstacles that hinder physicians from mentoring. The authors recruited physicians to voluntarily participate in an anonymous survey using faculty listservs. Group differences were compared using Chi-Square and Fisher Exact tests. Two hundred and fifty-five physicians from sixteen departments responded to the survey. Mentoring productivity, defined as the number of mentees mentored per year since training, was associated with career track, prior mentoring training, and how much the physician publishes. The most common motivations to mentor included personal fulfillment, talent development, to give back, and advocacy. Time constraint was the most frequent challenge in mentoring. The authors identified differences in motivations and challenges for physician-subgroups. By understanding factors associated with mentoring productivity, motivations for physicians to mentor, and barriers encountered by mentors, academic institutions can design initiatives, customized to specific physician subgroups, to better facilitate mentoring.

Keywords: mentoring, mentor, mentee, academic institution, physicians

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Introduction

The value of mentorship at academic institutions has been clearly established (Feldman et al., 2009; Penzner et al., 2018; Sambunjak et al., 2006; Schwartz et al., 2011). Mentorship leads to higher retention of faculty and more academic productivity such as grants, publications, and faster promotion. (Sambunjak et al., 2006). Given these crucial roles of mentoring, identifying the challenges that faculty face as mentors and their motivations to engage in productive mentor-mentee relationships is imperative. Although several studies have examined these challenges and motivations within sub-specialties or specific populations (Daubman et al., 2023; Murphy et al., 2020; Perry et al., 2020; Straus et al., 2009; Szabo et al., 2019), few studies have examined these factors for physician mentors across an academic institution. Finally, traditional mentor-mentee dyads pair early-career individuals with later-career ones on the assumption that

career stage correlates with mentoring experience. This study examined mentoring experience, captured as mentoring productivity (number of mentees per year), separately from career stage (years since training). By understanding what contributes to mentoring productivity and the motivations and challenges for physician mentors, academic institutions can create incentives and reduce barriers to mentoring, which can aid career development for physicians.

Our primary aim was to examine factors associated with mentoring productivity, defined as the number of mentees mentored per year since training. These factors included career track, previous mentoring training, and publication number. We hypothesized that career tracks in research, education, and clinical would demonstrate differences in mentoring activity. We hypothesized that physicians who published more and who had prior mentoring training would be more productive mentors. Our second aim was to examine factors

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that motivated and challenged physician mentors, and whether these factors differed between career track or career stage. Post-hoc analyses examined whether challenges, motivations, and mentoring productivity differed by self-identified gender or by the races/ethnicities underrepresented in medicine (URiM) based on the National Institutes of Health data on races/ethnicities underrepresented in health-related sciences (National Institutions of Health Diversity in Extramural Programs). We explored whether challenges faced by the most productive mentors compared to physicians who mentored least differed from the challenges that physicians with more years out of training experienced compared to early-career physicians.

Methods

Study Design

Between June 2022 and October 2022, physicians at Weill Cornell Medicine were emailed a link to an anonymous 19-question Qualtrics characteristics survey via departmental faculty listservs (survey available upon request from authors). Our primary aim was to characterize how career track, previous mentoring training, and number of publications were associated with mentoring. Mentoring was defined as “a relationship in which your role is to longitudinally guide or advise a colleague or trainee on academic projects or career development.” We calculated physicians’ mentoring productivity, defined as the estimated number of mentees divided by their reported number of years since training. The survey provided ranges for estimated number of mentees (0 to 100). To minimize error associated with physician estimation, we analyzed the median of each range, and calculated quartiles of mentoring productivity, which was used as the primary outcome variable. Cutoff points for the quartiles were based on the distribution of the sample as follows:

1st quartile = <0.5

2nd quartile = 0.5 to 1.058 (median)

3rd quartile = >1.058 and <2.25

Top quartile = ≥ 2.25 (estimated mentees/year)

Chi-squared tests of homogeneity or Fisher exact tests (depending on validity of normality assumptions) assessed whether the distribution of mentoring productivity varied by: (1) physician career track (self-reported choice of clinician, educator, or researcher [Office of Faculty, Weill Cornell Medicine]). At Weill Cornell Medicine, faculty self-select their promotional track. (2) Previous mentoring training (yes or no). (3) Number of publications (0 to >200). Publication number was divided into tertiles (low, medium, and high).

Secondary outcomes included challenging and motivating factors in mentoring for all participants

and for participant subgroups. Participants completed 5-point Likert scales that assessed their level of agreement with potentially challenging and motivating factors. These responses were analyzed as binary variables (1-3 were no; 4-5 were yes). The most challenging and motivating factors were reported for the overall study population and for the following physician subgroups: (1) career track (clinician, educator, or researcher) and (2) career stage (defined as early-career, <10 years out of training, or later-career, ≥ 10 years out of training). Chi-Square tests of homogeneity or Fisher Exact tests assessed whether the distribution of challenges and motivations significantly differed between subgroups.

Data Analysis

Descriptive statistics (mean and standard deviation for normally distributed data, median with interquartile range for non-normally distributed data) were calculated for continuous measures (years post-training, total mentees). Percentage breakdowns were used for categorical variables (department, gender, race, articles published/year, promotion track, mentoring training).

The following post-hoc analyses were calculated using Chi-Square and Fisher Exact tests: differences in primary and secondary outcomes between any two groups (clinician, researcher, educator) and by whether the physician self-identities as belonging to a race or ethnicity URiM; differences in challenges experienced by the top and bottom quartile of mentoring productivity; and whether challenges, motivations, and mentoring productivity differed between males and females, and between URiM and non-URiM physicians.

All p-values were two-sided with statistical significance evaluated at the 0.05 alpha level.

Analyses were performed in SAS Version 9.4 (SAS Institute, Inc., Cary, NC).

This study (protocol 21-07023768) was reviewed by Weill Cornell Medicine Institutional Review Board and determined to be exempt.

Results

Two hundred and fifty-five physicians from 16 departments (39.5% from medicine, 11.9% from psychiatry, and 11.9% from pediatrics) responded to the survey (See Table 1). Fifty-five percent identified as male, 44% as female, and 1% preferred not to say. Sixty-seven percent identified as non-Hispanic White, 20% as Asian, 6% as Hispanic/Latino White, 2% as non-Hispanic Black/African American, and 1% as Hispanic/Latino Black.

Career track, previous mentoring training, and articles published per year were associated with mentoring productivity (See Table 2). Educators

Table 1: *Participant characteristics of 255 physicians at Weill Cornell in year 2022*

	Survey respondents (%) Total N= 255	Number of full-time faculty Total N= 2,104 (Tung et al., 2024)
Gender		
Male	139 (55%)	1,111 (53%)
Female	112 (44%)	990 (47%)
Prefer not to say	2 (1%)	
Race/Ethnicity		
American Indian or Alaska Native	0	
Non-Hispanic White	166 (67%)	
Asian	49 (20%)	
Native Hawaiian or Other Pacific Islander	0	
Hispanic, Latino, or of Spanish Origin and White	14 (6%)	
Non-Hispanic Black or African American	6 (2%)	
Hispanic, Latino, or of Spanish Origin and Black	3 (1%)	
Other	10 (4%)	
URiM/not URiM		
URiM	27 (11%)	203 (10%)
Not URiM	218 (89%)	
Department		
Medicine	100 (40%)	598 (28%)
Psychiatry	30 (12%)	179 (9%)
Pediatrics	30 (12%)	157 (7%)
Emergency Medicine	21 (8%)	84 (4%)
Anesthesiology	19 (8%)	114 (5%)
Cardiothoracic Surgery	12 (5%)	24 (1%)
Ophthalmology	11 (4%)	32 (2%)
Pathology	10 (4%)	91 (4%)
Dermatology	6 (2%)	19 (1%)
Radiology	4 (2%)	179 (9%)
Otolaryngology	3 (1%)	26 (1%)
Surgery	2 (1%)	110 (5%)
Neurology	2 (1%)	67 (3%)
Radiation Oncology	1 (<1%)	24 (1%)
Population Health Science	1 (<1%)	50 (2%)
Orthopedic Surgery	1 (<1%)	Not available

mentored more than clinicians.

Most physicians were motivated to mentor for personal fulfillment, to develop talent, to give back, and for advocacy (See Table 3). Career track was associated with the motivation to mentor to develop talent and for career advancement. Researchers were more likely to be motivated to mentor to

develop talent than clinicians. Early-career faculty were more likely motivated by departmental expectations of mentoring.

Regarding challenges experienced, most physicians reported time constraints as a challenge to mentoring (See Table 3). Career track was associated with experiencing challenges when

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Table 2: Primary outcome: Mentoring productivity for 255 physicians at Weill Cornell in year 2022

Factors	Mentoring productivity N (%)				
	1st quartile	2nd quartile	3rd quartile	Top quartile	
Career track					Overall: P=0.008; educator vs clinician: p<0.005
Clinician (N= 186)	54 (29%)	53 (29%)	42 (23%)	37 (20%)	
Educator (N= 18)	1 (5%)	2 (11%)	6 (33%)	9 (50%)	
Researcher (N= 44)	7 (16%)	9 (21%)	13 (30%)	15 (34%)	
Previous mentoring training					P=0.048
Yes (N= 82)	14 (17%)	23 (28%)	17 (21%)	28 (34%)	
No (N= 169)	48 (28%)	41 (24%)	45 (27%)	35 (21%)	
Number of publications					P=0.0004
Highest tertile (N= 43)	8 (19%)	4 (9%)	17 (40%)	14 (33%)	
Middle tertile (N= 122)	21 (17%)	37 (30%)	30 (25%)	34 (28%)	
Lowest tertile (N=86)	33 (38%)	23 (27%)	15 (17%)	15 (17%)	

mentoring related to mentee's engagement, unexpected weaknesses in mentees, and not knowing how to be a good mentor. Researchers were more likely challenged by unexpected weaknesses in mentees' skills than clinicians. Clinicians were more likely challenged by not knowing how to be a good mentor than educators. Later-career physicians were more likely challenged by increased work involved, difficulty leading projects, feeling unqualified, and not knowing how to be good mentors than early-career physicians. In contrast, physicians in the top quartile of mentorship rate (the most productive mentors) were less challenged by feeling unqualified (OR 0.37, CI 0.15-0.87; p=0.02) and were less challenged by not knowing how to be a good mentor compared to physicians in the lowest mentorship rate quartile (OR 0.33, CI 0.13-0.84; p=0.02).

Motivations also differed based on self-identified gender and race-ethnicity. Females were more frequently motivated by connecting with other specialties or colleagues (OR 1.68, CI 1.01-2.79; p=0.04) and addressing disparities or inequities in the field (OR 2.12, CI 1.28-3.54; p<0.01). Females were more likely challenged by not knowing how to assess mentees' skills (OR 1.93, CI 1.02-3.63; p=0.04), time constraints (OR 2.02, CI 1.13-3.60; p=0.02), feeling unqualified (OR 2.26, CI 1.23-4.13; p<0.01), and not knowing how to be a good mentor (OR 2.39, CI 1.24-4.58; p<0.01). Mentoring productivity did not differ between males and females.

URIM physicians, 27 (11%) respondents, were significantly more likely to identify the following as

challenges in mentoring: problems with mentee's engagement or responsiveness (OR 2.45, CI 1.09-5.51; p=0.03), not knowing how to assess mentees' skills (OR 2.72, CI 1.16-6.41; p=0.02), and ability to plan and lead projects (OR 2.66, CI 1.13-6.27; p=0.02). Mentoring productivity did not differ between URIM and non-URIM physicians.

Discussion

Career track, previous mentoring training, and publishing productivity were associated with mentoring productivity. Educators had higher mentoring productivity than clinicians. Educators have more contact with mentees, and they may pursue an education-track due to their passion for mentoring. The association between previous mentoring training and mentoring productivity is consistent with prior studies, and it may be bidirectional. One study found that a mentor development program helped most mentors-in-training improve skills and confidence in mentoring (Feldman et al., 2009). Furthermore, prior reports support that mentors desire mentorship training (Straus et al., 2009; Szabo et al., 2019). Physicians who seek mentoring training may intrinsically value and pursue mentoring more than physicians who do not. Conversely, physicians who have participated in mentoring training may feel more prepared to mentor or learn the skills imperative to initiating mentor-mentee relationships. Prior authors hypothesized that mentoring would increase academic productivity for mentors (Murphy et

Table 3: Motivations and challenges in mentoring identified by 255 physicians at Weill Cornell in year 2022

Motivations	Total N= 255	Career track N= 44	Career stage N=18				
	Yes: 4 or 5 out of 5	Res N= 44	Edu N=18	Clin N= 188	Late N=93	Early N=158	Subgroup difference
Feels personally rewarding	219 (87%)	41 (93%)	16 (89%)	159 (85%)	81 (87%)	137 (87%)	
Develop talent	193 (77%)	40 (91%)	12 (71%)	138 (74%)	65 (71%)	127 (81%)	Career track overall: P=0.037; researcher vs clinician: p=0.016
Feeling obliged to “give back” mentoring I received	143 (57%)	29 (66%)	6 (35%)	105 (56%)	51 (55%)	92 (58%)	
Advocacy	142 (56%)	23 (52%)	10 (56%)	107 (57%)	49 (53%)	93 (58%)	
Addressing disparities or inequities in the field	121 (48%)	22 (50%)	8 (44%)	88 (47%)	45 (49%)	76 (48%)	
Connecting with other specialties/colleagues	113 (45%)	16 (36%)	10 (59%)	86 (46%)	45 (49%)	68 (43%)	
Staying up to date in the literature	86 (34%)	11 (25%)	3 (18%)	69 (37%)	29 (32%)	57 (36%)	
Becoming better recognized, building a reputation inside the institution	82 (33%)	14 (32%)	4 (24%)	64 (34%)	33 (35%)	49 (31%)	
Becoming better recognized, building a reputation outside the institution	77 (31%)	20 (45%)	5 (28%)	52 (28%)	28 (30%)	49 (31%)	
My career advancement and productivity	77 (30%)	25 (57%)	4 (22%)	48 (26%)	30 (32%)	47 (30%)	Career track overall: P=0.0002
Learning about other specialties	66 (26%)	8 (18%)	4 (24%)	52 (28%)	20 (22%)	46 (29%)	
It's a requirement/ expectation for my department	45 (18%)	7 (16%)	3 (19%)	34 (18%)	10 (11%)	35 (23%)	Career stage: P=0.02
Challenges							
Time constraints	180 (72%)	30 (68%)	13 (76%)	135 (72%)	71 (76%)	109 (69%)	
Problems with mentee's engagement/ responsiveness	83 (33%)	21 (48%)	7 (41%)	54 (29%)	29 (32%)	54 (35%)	Career track overall: P=0.0497

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Unexpected weaknesses in mentee's skill set	67 (27%)	24 (55%)	4 (24%)	38 (20%)	26 (28%)	41 (26%)	Career track overall: P<0.0001; researcher vs clinician: p<0.0001
It's more work than just doing the project myself	66 (27%)	9 (20%)	4 (24%)	53 (29%)	36 (39%)	30 (19%)	Career stage: p=0.0006
Feeling unqualified or not experienced enough in my field	57 (23%)	5 (12%)	2 (12%)	50 (27%)	36 (39%)	21 (14%)	Career stage: p<0.0001
Identifying available mentees	55 (22%)	11 (26%)	2 (12%)	41 (22%)	21 (23%)	33 (21%)	
Struggles related to my ability to plan and lead a project	49 (20%)	5 (12%)	4 (24%)	40 (22%)	31 (34%)	18 (12%)	Career stage: P<0.0001
Not knowing how to assess a mentee's skills and knowledge base	49 (20%)	10 (23%)	1 (6%)	37 (20%)	24 (26%)	25 (16%)	
Not knowing how to be a good mentor	47 (19%)	5 (11%)	0 (0%)	42 (22%)	27 (29%)	20 (13%)	Career stage: p=0.0014; career track overall: p=0.0243; clinician vs educator: P=0.0262
Lack of recognition or reward	30 (12%)	4 (9%)	1 (6%)	25 (13%)	12 (13%)	18 (11%)	
Communication problems between the mentee and myself	15 (6%)	3 (7%)	0 (0%)	11 (6%)	6 (7%)	9 (6%)	
Competition between myself and colleagues for mentees	15 (6%)	6 (14%)	0 (0%)	9 (5%)	7 (8%)	8 (5%)	
Authorship decisions/ intellectual property concerns	3 (1%)	1 (2%)	0 (0%)	2 (1%)	0 (0%)	3 (2%)	
Cultural challenges or identity differences between myself and mentee	2 (1%)	0 (0%)	0 (0%)	2 (1%)	0 (0%)	2 (1%)	

al., 2020). Here, physicians who mentored more also published more. While the direction is not known, these results suggest that mentoring may help physicians be more academically productive and advance their academic careers. Academic promotion and reputation outside of the physician's academic institution both depend on publishing. Working with mentees on manuscripts may hold physicians accountable to completion of projects or may add the reward of teaching to the process. Future studies should investigate reasons

why mentoring is associated with publishing. Nevertheless, wider recognition of this association, such as by academic center administration or through mentorship training, could promote mentoring and, in turn, career advancement for both mentors and their mentees. By understanding what motivates physicians to mentor, academic institutions can encourage mentoring. Most physician respondents were motivated to mentor for personal fulfillment, to develop talent, because they feel obliged to give back the type of mentoring

they received, and for advocacy.

Physician subgroups differed in motivations, and programs to facilitate mentoring should be created based on specific subgroups' needs. Most researchers were motivated to mentor to develop talent. Researchers' careers and daily work are closely tied to mentees. Highlighting the association between publishing productivity and mentoring may encourage researchers to mentor more. Females were more motivated to address disparities than males. Females may more frequently experience disparities personally. Our findings are consistent with prior work describing the importance of self-identified gender on mentoring experiences. Engagement by a female mentor increases a sense of belonging among female mentees, challenges unconscious biases about the roles female physicians play in academic institutions, and it offers a certain expertise in navigating challenging issues specific to minority experience (Abraido-Lanza et al., 2022; American Medical Association, 2021; Lin et al., 2019; Trinh et al., 2021).

Consistent with prior findings (Straus et al., 2009), time constraints were the most frequently reported challenge to mentoring. Initiatives to help structure time, including protected time for mentoring, may help physicians overcome this obstacle and mentor more. Physician subgroups faced different challenges. Initiatives to promote mentoring should be tailored to the specific group of physicians. Researchers were more challenged by finding unexpected weaknesses in mentee's skills than clinicians. Researchers may depend on mentee skills and quality of work for their career advancement and job responsibilities more than clinicians. Furthermore, publishing is an inherent part of researchers' careers, and they may depend on mentees to achieve this. Mentorship training focused on assessing mentee skills may benefit researchers most.

Our study revealed novel findings regarding challenges faced by later-career physicians (who have more years of experience as an attending after training) and by more productive mentors (who mentor a greater number of mentees/year). Later-career physicians, when not considering mentoring experience, were more likely than early-career physicians to be challenged by ability to lead projects, increased work involved, not knowing how to be a good mentor, and feeling unqualified. In contrast, the most productive mentors were less challenged by feeling unqualified and by not knowing how to be a good mentor than the least productive mentors. In contrast to common assumption, these results highlight that career stage does not necessarily translate to confidence or expertise in mentoring. Mentoring productivity is what institutions should value when trying to identify expert mentors. Fostering opportunities

for early-career physicians to mentor to develop mentoring skills may increase confidence and support mentoring across their careers. These opportunities include mentorship training or formally pairing mentees with mentors early in their careers. The struggles encountered by later-career physicians may be because physicians often further subspecialize as they progress through their careers, leading them to acquire advanced understanding of a specific area of expertise, which may widen the gap between their knowledge on a project and that of a mentee.

Despite no difference in mentoring productivity between females and males, females had less confidence in their mentoring abilities, both in ability to assess mentees and knowing how to be a good mentor, which may reflect imposter syndrome or gender biases they have faced. Despite feeling more challenged by time constraints, females were as productive mentors as males. Similarly, despite no difference in mentoring productivity between URiM and non-URiM physicians, URiM physicians felt less confident assessing mentee's skills and leading projects, which may reflect biases experienced in medicine. Initiatives to help understand and address the experiences of female and URiM physicians are vital, including by addressing systemic racism (American Medical Association, 2021).

Limitations

Our study has several limitations, and we propose future studies to address these limitations. While mentoring training was associated with being a productive mentor, we did not investigate the type of training that may be helpful. Future studies are needed to investigate whether mentoring training programs that focus on the motivations and challenges identified here would be helpful to physician mentors' confidence in mentoring and mentoring productivity. Our sample included a small number of URiM physicians, and our findings are not necessarily translatable to physicians of all races and ethnicities. Future studies with more diverse samples are needed to foster mentoring and career development for physicians of different racial and ethnic backgrounds, including females belonging to races-ethnicities URiM. Finally, non-response bias may have influenced our results. Physicians interested in mentoring may have been more likely to complete this survey.

Implications

It is critical to understand physician mentors' experiences in order to both increase mentoring and also improve experiences mentoring. Mentoring has implications for the mentor, mentee, and their academic institution. Mentoring is important for the mentor's career progression. Mentoring plays a pivotal role in the mentee's development of skills, and it is crucial for the mentee to have

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access to career guidance. Finally, studies support the importance of mentoring for retention of faculty at academic institutions. Unfortunately, while mentees' experiences are well documented in the literature, less is known about academic physician mentors' experiences. In this study, we identified the factors that are most rewarding to physicians when mentoring. If these factors are further facilitated, academic institutions may be able to increase mentoring. We additionally identified factors that hinder academic physicians from mentoring most. If these factors, including time constraints, are addressed, mentors may be able to more efficiently and productively mentor. We found that mentorship training was associated with mentoring more. While future studies need to examine the type of mentorship training that would be most helpful to mentors, access to guidance and training in mentoring may help promote mentoring and remove barriers to mentoring. Furthermore, our study identified motivating and hindering factors that could be targeted in mentoring training programs. Finally, we found that the experiences of mentors from different physician subgroups differed. As a result, initiatives to help promote mentoring and remove obstacles to mentoring, including mentorship training programs, should be tailored to the specific physician sub-group. The needs of one gender or one career track, for example, differ from others.

Conclusion

We identified factors associated with mentoring, and motivations and challenges to mentoring for physicians at an academic institution. Our findings agree with prior reports demonstrating the importance of mentorship training and the challenge of time-constraints. Physician subgroups experienced different challenges and motivations in mentoring. This highlights the importance of tailoring initiatives to promote mentoring to the specific group. These results can inform the development of programs to bolster mentoring, which is vital for academic career advancement.

References

- Abraido-Lanza, A., Echeverria, S., Flórez, K., et al. (2022). Latina women in academia: Challenges and opportunities. *Frontiers in Public Health*, 10, 876161. DOI: [10.3389/fpubh.2022.876161](https://doi.org/10.3389/fpubh.2022.876161)
- AMA adopts guidelines that confront systemic racism in medicine. American Medical Association. Accessed 7/24/24: <https://www.ama-assn.org/press-center/press-releases/ama-adopts-guidelines-confront-systemic-racism-medicine>.
- Daubman, B. R., Lawton, A.J., Zehm, A., et al. (2023). The tween years: Thriving as a mid-career academic hospice and palliative medicine clinician. *Journal of Palliative Medicine*, 26, 321-326. DOI: [10.1089/jpm.2022.0285](https://doi.org/10.1089/jpm.2022.0285)
- Feldman, M. D., & Huang, L., Guglielmo, B.J., et al. (2009). Training the next generation of research mentors: The University of California, San Francisco, Clinical & Translational Science Institute Mentor Development Program. *Clinical and Translational Science*, 2, 216-221. DOI: [10.1111/j.1752-8062.2009.00120.x](https://doi.org/10.1111/j.1752-8062.2009.00120.x)
- Lin, M. P., & Lall, M.D., Samuels-Kalow, M., et al. (2019). Impact of a women-focused professional organization on academic retention and advancement: Perceptions from a qualitative study. *Academic Emergency Medicine*, 26, 303-316. DOI: [10.1111/acem.13699](https://doi.org/10.1111/acem.13699)
- Murphy, A. M., Shenot, P. J., & Lallas, C. D. (2020). Faculty development: How do we encourage faculty to become better teachers and mentors? *Current Urology Reports*, 21, 40. DOI: [10.1007/s11934-020-00994-z](https://doi.org/10.1007/s11934-020-00994-z)
- Penzner, J. B., Snow, C. E., Gordon-Elliott, J. S., et al. (2018). A multi-tiered model for clinical scholarship. *Academic Psychiatry*, 42, 399-401. DOI: [10.1007/s40596-017-0772-7](https://doi.org/10.1007/s40596-017-0772-7)
- Perry, R. E., Parikh, J. R. (2020). Mentorship of junior radiologists in nonacademic radiology. *Clinical Imaging*, 64, 7-10. DOI: [10.1016/j.clinimag.2020.02.005](https://doi.org/10.1016/j.clinimag.2020.02.005)
- Preparing for promotion: Criteria for faculty appointment and promotion. Office of Faculty. Accessed 8/26/24: <https://faculty.weill.cornell.edu/faculty-development/preparing-promotion>.
- Sambunjak, D., Straus, S. E., & Marusic, A. (2006). Mentoring in academic medicine: A systematic review. *Journal of the American Medical Association*, 296, 1103-1115. DOI: [10.1001/jama.296.9.1103](https://doi.org/10.1001/jama.296.9.1103)
- Schwartz, A. L. (2011). Commentary: Physician-scientist attrition: Stemming the tide through national networks for training and development. *Academic Medicine*, 86, 1071-1072. DOI: [10.1097/ACM.0b013e318224fd75](https://doi.org/10.1097/ACM.0b013e318224fd75)
- Straus, S., Chatur, F., & Taylor, M. (2009). Issues in the mentor-mentee relationship in academic medicine: A qualitative study. *Academic Medicine*, 84, 135-139. DOI: [10.1097/ACM.0b013e31819301ab](https://doi.org/10.1097/ACM.0b013e31819301ab)
- Szabo, S., Lloyd, B., McKellar, D., et al. (2019). 'Having a mentor helped me with difficult times': A trainee-run mentoring project. *Australasian Psychiatry*, 27, 230-

233. DOI: [10.1177/1039856218822735](https://doi.org/10.1177/1039856218822735)
Trinh, L., O'Rourke, E., & Mulcahey, M. (2021). Factors influencing female medical students' decisions to pursue surgical specialties: A systematic review. *Journal of Surgical Education*, 78, 836-849. DOI: [10.1016/j.jsurg.2020.08.050](https://doi.org/10.1016/j.jsurg.2020.08.050)
Tung, J., Kuiava, M., Vuong, S., et al. (2024). Lack of reciprocation in the reported relationships between mentors and mentees on the annual faculty review: An opportunity to formalize mentoring. *Journal of Faculty Development*, 38, 53-61. DOI: [10.4269/ajtmh.18-0559](https://doi.org/10.4269/ajtmh.18-0559)
Underrepresented Racial and Ethnic Groups. National Institutes of Health Diversity in Extramural Programs. Accessed 7/24/24: <https://extramural-diversity.nih.gov/diversity-matters/underrepresented-groups>.

About the Authors

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Alyson Gorun, M.D. is an Assistant Professor of Clinical Psychiatry at Weill Cornell Medicine and an Assistant Attending Psychiatrist at NewYork-Presbyterian Hospital. She received her undergraduate and medical degrees from New York University. She completed residency training in psychiatry as chief resident at NewYork-Presbyterian Hospital/Weill Cornell Medicine and a Reproductive Psychiatry Fellowship at NewYork-Presbyterian Hospital/Columbia University Medical Center. She is currently the Associate Training Director of the General Psychiatry Residency Program as well as the Director of Psychotherapy Training at NewYork-Presbyterian/Weill Cornell Medicine. She has published and presented nationally in a number of areas including women's mental health, trauma, psychodynamic psychotherapy, and resident education.

Alison Hermann, MD is a psychiatrist who specializes in women's reproductive health. Dr. Hermann completed her undergraduate studies in Psychobiology at The Ohio State University in Columbus, Ohio. She graduated from the State University of New York Health Sciences Center, Brooklyn with distinction in Neuroscience and

completed her General Psychiatry residency at Columbia University Medical Center-New York State Psychiatric Institute, where she was chief resident. Her fellowship training in Women's Mental Health was at Columbia University Medical Center with Dr. Elizabeth Fitelson. Dr. Hermann is currently the Clinical Director of the Women's Mental Health Program at Weill Cornell Medicine. In this role, Dr. Hermann has substantially expanded psychiatric services for perinatal women as well as educational offerings in reproductive mental health for clinicians and trainees at multiple levels. Dr. Hermann's research interests include developing a machine-learning risk prediction algorithm and shared clinical decision-making tool for postpartum depression, developing an ecological momentary assessment tool for monitoring symptoms across periods of hormonal flux such as menstruation or pregnancy and lactation, and delivering app-based psychotherapy interventions for postpartum mood and anxiety disorders. Dr. Hermann is currently on the faculty of Weill Cornell Medical College and New York-Presbyterian Hospital as Associate Professor in Clinical Psychiatry.

Leah C. Susser, MD, completed medical school at Columbia University College of Physicians and Surgeons in 2012 and psychiatry residency at New York Presbyterian Hospital (NYPH)/Weill Cornell Medical College in 2016. Throughout residency, she specialized in reproductive psychiatry through the Weill Cornell Women's Program. After completing residency in 2016, she established the reproductive psychiatry clinic at NYPH/Weill Cornell Westchester Behavioral Health Center. Dr. Susser is now Program Director of the cross-campus NYPH/Weill Cornell Medicine Ambulatory Reproductive Psychiatry Program. She is extensively involved in teaching and mentoring trainees, faculty, and staff across disciplines. She co-developed and co-directs a reproductive mental health postdoctoral psychology fellowship. During the first several years of the COVID-19 pandemic, she co-developed and co-led a new psychiatry rotation for the Weill Cornell physician assistant students. She is director of the Weill Cornell Women's Program Journal Club, through which she teaches trainees about critically reading reproductive psychiatry literature.

Judy Tung, MD obtained her medical degree at Albert Einstein College of Medicine, completed internal medicine residency at the University of California, San Francisco, and served as chief resident at New York University/ Bellevue Hospital. She joined the faculty at Weill Cornell Medicine in 2001 and has served as program director for the primary care internal medicine residency, associate program director for the categorical internal medicine residency, medical director of the faculty- resident outpatient practice, Weill Cornell

Identifying the Motivations, Barriers, and Factors Associated with Mentoring among Academic Physicians

Internal Medicine Associates, chief of the section of ambulatory internal medicine, chair of medicine at the New York Presbyterian- Lower Manhattan Hospital and associate dean of faculty development at Weill Cornell. In this latter role, she chairs the Mentoring Academy Council, comprised of faculty champions who represent their 26 departments. She also directs a leadership course for early career faculty called the Leadership in Academic Medicine Program.