

Sex Differences in Workplace Satisfaction and Engagement of Academic Pathologists

Opportunities to Enhance Faculty Diversity

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• **Context.**—There is attrition of women across professorial ranks in academic pathology. Women are underrepresented as leaders; 15.4% of academic pathology departments are chaired by women, according to the Association of American Medical Colleges (AAMC).

Objective.—To identify areas for targeted interventions that can advance academic and leadership development of women faculty by examining (1) sex differences in career satisfaction in US medical school pathology departments participating in the AAMC's Faculty Forward Engagement Survey, and (2) findings from a survey of the Association of Pathology Chairs (APC).

Design.—The AAMC Faculty Forward Engagement Survey data are from 14 US medical schools participating in the 2011–2012 survey. Pathologists' response rate was 66% (461 of 697). To investigate sex differences, *t* tests and χ^2 analyses were used. The APC survey, administered to academic department chairs, had a 55% response rate (104 of 189).

The Association of American Medical Colleges (AAMC) predicts a physician shortage across all specialties because of a looming retirement cliff from an aging workforce, the aging of the general population who will have growing health care needs, and a trend for more medical graduates to pursue careers that don't involve patient care, such as careers in industry or health care administration.^{1,2} The Patient Protection and Affordable Care Act of 2010 has added to the need for physicians, causing the predicted shortage to grow from 64 100 to 91 500.³ The number of practicing pathologists is already

Results.—According to the Faculty Forward Engagement Survey, women report more time in patient care and less time in research. Women consider formal mentorship, feedback, and career advancement more important than men do and are less satisfied with communication and governance. The APC survey shows that 20% to 40% of nonchair department leaders are women. More than half of chairs report satisfaction with the sex diversity of their departmental leaders.

Conclusion.—Opportunities exist for department chairs and professional organizations to create targeted interventions to support career satisfaction, recruitment, retention, and career and leadership development for women in academic pathology. Although chairs report satisfaction with diversity within department leadership, responses of women faculty indicate there is work to be done to grow more women leaders.

(*Arch Pathol Lab Med.* 2015;139:936–942; doi: 10.5858/arpa.2014-0312-EP)

declining. The AAMC's 2012 *Physician Specialty Data Book*, which represents the most current physician workforce data available across the specialties, reports a 7.2% decrease in active physicians practicing anatomic and clinical pathology. Notably, anatomic and clinical pathology was among 4 of 36 surveyed specialties (11%) that showed a shrinking workforce.⁴ Because of this trend, academic pathology will inevitably experience a faculty shortage and challenges in recruitment, as will other types of practices within our specialty.

As career consultant and former Associate Vice President for Medical School Affairs for the AAMC, Janet Bickel, MA, wisely points out "... given that 50% of medical students are women, the future of any specialty is inextricably linked to its development of women professionals."⁵ The AAMC reported that women constitute 33.2% of active anatomic and clinical pathologists and 53.8% of residents in anatomic and clinical pathology, both of which are slightly above the national averages for all specialties.⁶ This margin is slim, and steps need to be taken to ensure that a decline does not occur. In clinical academic pathology, women are underrepresented at the full professor rank: Only 29.4% of women faculty are at full professor rank, as compared with 70.6% of men,⁶ despite women composing more than 30% of medical school classes for more than 20 years. Similar sex differences

Accepted for publication October 8, 2014.

Published as an Early Online Release December 15, 2015.

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The authors have no relevant financial interest in the products or companies described in this article.

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are seen among the basic science faculty in academic pathology departments.⁶ Likewise, there is clearly a retention issue because each professorial rank contains a diminishing percentage of women in both clinical pathology and basic science, despite the long-standing and strong representation of women in medical school classes and in graduate school. Even fewer women rise to become department chairs; the AAMC data indicate that women serve as chairs in only 15.4% (10 of 69) of academic departments of pathology.⁷ Basic science faculty in academic pathology departments show similar sex distribution. This “leaky pipeline” phenomenon is present throughout the biomedical workforce and has attracted significant attention as a result of the National Academies’ report, *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*.⁸ Many specialty organizations have critically examined the issues facing women in their discipline, as well as those unique to academia, to plan interventions that can strategically address these issues as a discipline. Common themes are present in all these studies: Women experience less mentorship, receive fewer resources and lower salaries, spend more time in clinical and teaching activities, and publish less often.^{9–13}

Sex differences in academic pathology have not been examined. Addressing sex-related issues is critical to the future of academic pathology. Recruitment of women residents to careers in academic pathology, and retention of women faculty, will inevitably be more difficult if sex-based career challenges are not adequately defined so solutions appropriate to this discipline can be implemented. The purpose of this study was to examine differences in career and workplace satisfaction between female and male faculty in academic pathology departments at US medical schools participating in the AAMC’s Faculty Forward Engagement Survey (FFES)¹⁴ and to identify the areas in which targeted interventions would be most effective in advancing academic careers for women in pathology. The FFES provides a unique opportunity to examine workplace satisfaction and engagement among women in departments of pathology from participating academic medical centers. To provide additional context and further illuminate the issues identified in the FFES, we also discuss and share the findings from a recent survey from the Association of Pathology Chairs (APC) related to sex and faculty leadership development.

METHODS

Faculty Forward Engagement Survey

Data from the AAMC FFES are from 14 US medical schools accredited by the Liaison Committee on Medical Education that self-selected to participate in this survey in 2011–2012. Full-time and part-time faculty at participating institutions were invited to participate in a Web-based survey to assess faculty satisfaction, intent to leave, and the workplace factors that may be related to overall engagement and retention. The survey instrument was developed and tested in 2008–2009 by experts in survey research, organizational science, and academic medicine. The instrument was refined in 2011 based on psychometric analyses that supported expansion of survey content and the development of summary scores for each survey dimension. These changes contributed to the content and construct validity of the final instrument to measure faculty perceptions of the workplace.

Full- and part-time faculty (n = 15 570) from 14 US institutions were invited to participate. Of those, 9600 faculty responded to the survey, for a response rate of 61.7%.¹⁵ Of the 14 schools surveyed,

pathologists accounted for 4.5% (697 of 15 570) of the total population. Participating institutions approximated the overall faculty representation of schools accredited by the Liaison Committee on Medical Education in distribution of faculty invited by department type (basic versus clinical). The AAMC Medical School Profile System was used as the source of the faculty count. Full-time faculty counts reflected information from the AAMC Faculty Roster, as verified and updated by medical schools for purposes of Liaison Committee on Medical Education reporting.¹⁶

Faculty from 13 institutions received an initial e-mail invitation and several reminders to participate between October 2011 and December 2011. Faculty from the fourteenth institution received the same e-mail invitations and reminders on a slightly later timeline, between January 2012 and February 2012. The Committee on the Use of Human Subjects at the American Institutes for Research approved this study.

Nonresponse bias from unpublished data from FFES has indicated that the distribution of respondents differed slightly from the expected distribution of respondents, with fewer part-time ($\chi^2 = 117.045$, $P < .001$) and slightly more basic science faculty ($\chi^2 = 7.43$, $P = .006$) responding than was expected. We used *t* tests and χ^2 analyses to investigate responses of men and women across the survey’s various dimensions to identify whether differences existed by sex and used qualitative data to illustrate those findings. Data were analyzed using IBM (Armonk, New York) SPSS Statistics software, version 19.

APC Survey

An online, 13-question survey was developed by members of APC’s Leadership Development & Diversity Committee. Administered via SurveyMonkey (Palo Alto, California), an online request with link to the survey Web site was sent to all 189 participating department chair members of the APC in March 2013. Responses were received from 104 of the 189 chairs (55%) sent the APC survey. The APC membership includes departments at US medical school institutions accredited by the Liaison Committee on Medical Education and/or those affiliated with graduate medical education programs accredited by the Accreditation Council for Graduate Medical Education. Reminder e-mails were sent to members in April 2013 and May 2013 to encourage survey participation. Opportunities to complete the survey by regular mail or by telephone were not provided.

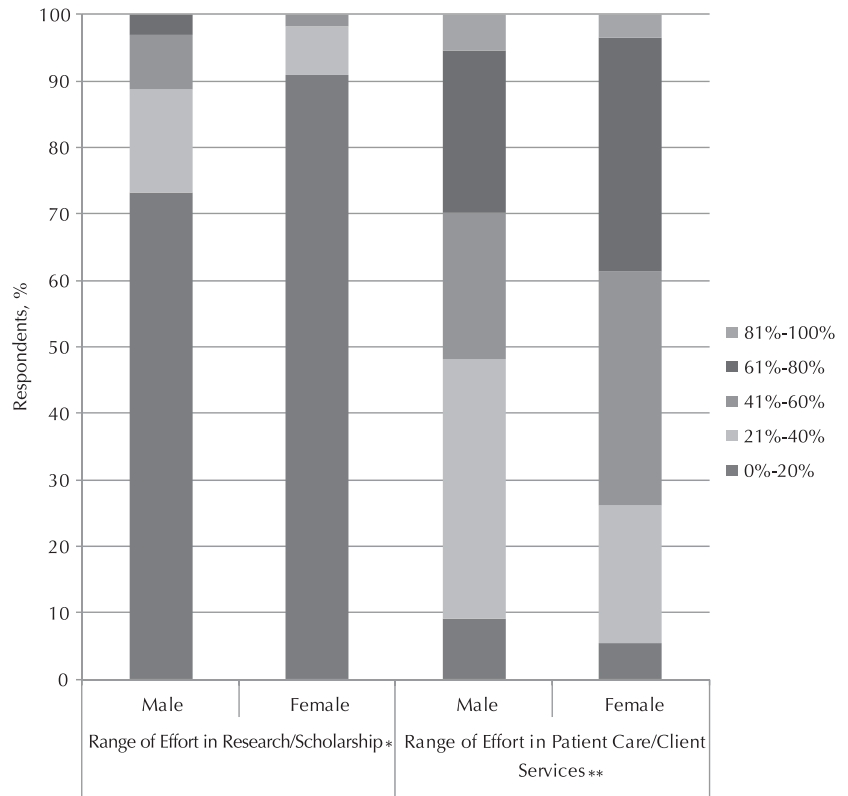
RESULTS

Faculty Forward Engagement Survey

For FFES reporting, *pathology* was categorized as a clinical department and included both anatomic pathologists and clinical pathologists practicing laboratory medicine. Sixty-six percent (461 of 697) of pathologists responded to the survey, of which approximately 60% (278 of 461) were men, 40% (183 of 461) were women, and 96% (444 of 461) were full-time faculty. Only 15 of the 461 respondents (3.3%) self-identified as part-time faculty members (8 men, 7 women). Respondents self-identified as of majority race and ethnicity (defined as white and Asian; 430 of 461; 93.3%), of senior rank (defined as full and associate professors; 289 of 440; 66%), and between 46 and 65 years old (63%; 244 of 388). The survey did not inquire about academic track.

Respondents indicated that, overall, they were satisfied with their medical school (69%; 298 of 433) and department (75%; 327 of 434), similar to other clinical respondents (65%, 5004 of 7646; and 73%, 5639 of 7685, respectively). No significant differences were found in comparing the responses. In comparing overall satisfaction for medical school and department respectively, responses from women (68%, 117 of 172; 75%, 129 of 172) and men (69.3%, 181 of 261; 75.6%, 198 of 262) also did not reveal any significant

Figure 1. Time/effort spent in research and patient care missions. * Research/scholarship includes research, reviewing or preparing articles or books, attending or preparing for professional meetings or conferences, reviewing or writing proposals, and seeking outside funding. ** Patient care/client services includes medical service, counseling patients or families, and administrative tasks associated with clinical service.



differences. Analyses by age and sex show that women 46 years and older were less satisfied than their male counterparts were with their medical school as a place to work (women, 66%, 62 of 94 versus men, 71.7%, 134 of 187; $P = .05$). In further investigating the factors that drive overall engagement, significant differences were reported among several domains.

Defining Roles.—Across all pathology faculty, women report working significantly fewer hours than men did (mean [SD], 52.2 [10.02] hours versus 55.1 [12.91] hours; $P = .01$). Approximately 2 in 5 women (41.6%; 72 of 173) reported spending more than 50 h/wk in all work activities, in contrast to approximately 3 in 5 men (55.6%; 150 of 270). Among faculty who reported spending, on average, 10% or less of their time in patient care activities (28.5%; 111 of 389), there were no significant differences between men and women in the way they reported spending their time across the mission areas of teaching/education, research/scholarship, patient care/client services, and administration and institutional service. Further, significant differences in hours reported for an average week across all faculty were not significant. However, a number of significant differences were observed between male and female faculty who reported spending more than 10% of their time in clinical care (278 of 389; 71.5). Women reported fewer hours, on average, per work week (women, 51.2 hours versus men, 55.9 hours; $P = .002$). In looking at sex across the average percentage of time spent in each mission area, women reported a higher percentage of time spent in clinical care activities (women, 55.8% [n = 114; SD = 19.25] versus men, 49% [n = 164; SD = 20.63]; $P = .005$), and less time in research activities (women, 11.2% [n = 111; SD = 8.51] versus men, 18% [n = 161; SD = 16.79]; $P < .001$) (Figure 1), whereas no significant differences were observed in

teaching or administrative responsibilities. Although the majority of both men and women reported spending 20% or less of their time or effort in research, this percentage was higher for women (91%; 101 of 111) than it was for men (73.3%; 118 of 161). In contrast, 74.5% (85 of 114) of women reported spending more than 40% of their time in patient care, compared with 51.8% (85 of 164) of men. In looking at their roles overall, significantly fewer female responding pathologists (72%; 125 of 173) agreed that it was clear how their day-to-day activities support the medical school's mission than did their male counterparts (78.3; 198 of 253) ($P = .01$).

Department Governance.—Men and women responded differently to a number of survey questions about department governance. Fewer women agreed that the chair's priorities were clear (59.4%; 104 of 175) versus men (73%; 187 of 256) ($P = .007$) and that the pace of decision making was reasonable (women, 51.8%, 85 of 164; versus men 63.9%, 159 of 249; $P = .02$). Women pathologists also less frequently agreed that there is sufficient communication from the department chair about the department (women, 61%, 108 of 177 versus men, 72.6%, 191 of 263; $P = .003$) and its finances (women, 52.2%, 93 of 178 versus men, 59.5%, 156 of 262; $P = .05$), and that there were sufficient opportunities for faculty participation in governance (women, 46.7%, 78 of 167 versus men, 61.6%, 157 of 255; $P = .01$). Finally, significantly fewer women agreed that their department chairs set good examples to reflect the medical school's values (women, 72.9%, 121 of 166 versus men, 82.1%, 206 of 251; $P = .04$). When asked what could be done to improve the department as a workplace, women suggested that "faculty members need to be informed and updated about changes or edits in the departmental policies," as well as to receive "... clear explanations about

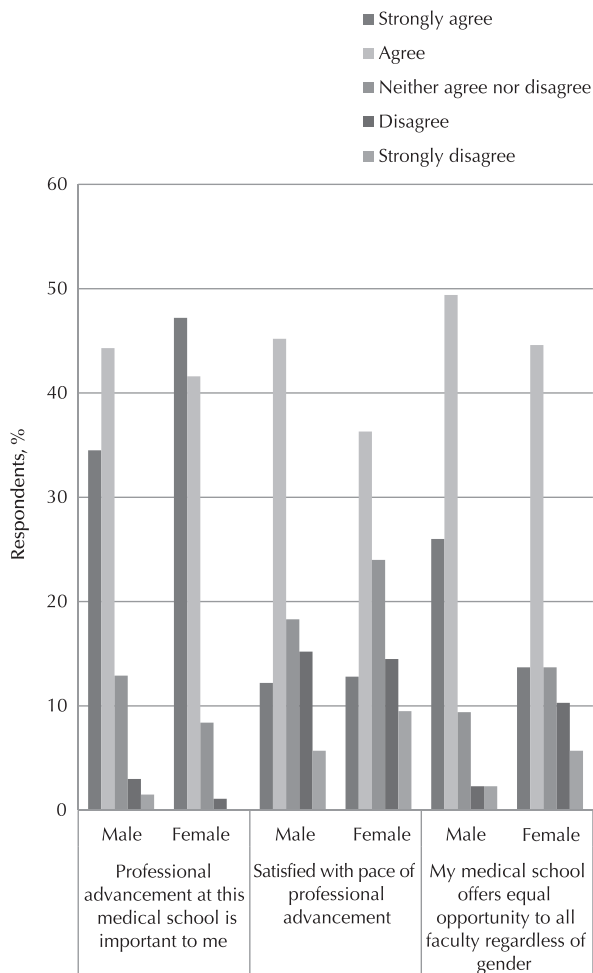


Figure 2. Opportunities for career and professional growth.

financial issues, budget, [and] financial development strategies." Women clearly articulated that "feedback is vital to keep morale high." Department chairs "must establish significantly better communication with departmental faculty" to avoid faculty who may "become discouraged due to the lack of interaction."

Growth and Advancement.—Responses indicate that significantly more women than men agreed that professional advancement at their medical schools was important to them (women, 90.3%, 158 of 175 versus men, 81.9%, 208 of 254; $P = .03$) (Figure 2). Although no significant differences existed by sex, less than two-thirds of pathologists were satisfied with the pace of their professional advancement (54.1%; 239 of 442) and the opportunities for professional development at their institutions (56.9%; 252 of 443). Further, analyses by age and sex and in comparing younger and older women showed no significant differences. Fewer female pathologists agreed that their medical schools offered equal opportunities regardless of sex (women, 66.2%, 102 of 154 versus men, 88.4%, 200 of 237; $P < .001$) and regardless of race and ethnicity (women, 72.4%, 105 of 145 versus 83.5%, 193 of 231; $P = .03$). Women also less frequently agreed that it was clear what was expected of them in the mission areas of teaching (women, 61%, 97 of 159 versus men, 72.5%, 158 of 218; $P = .05$) and administration (women, 50.3%, 76 of 151 versus men, 60.4%, 128 of 212; $P < .001$) to be promoted (Figure 2).

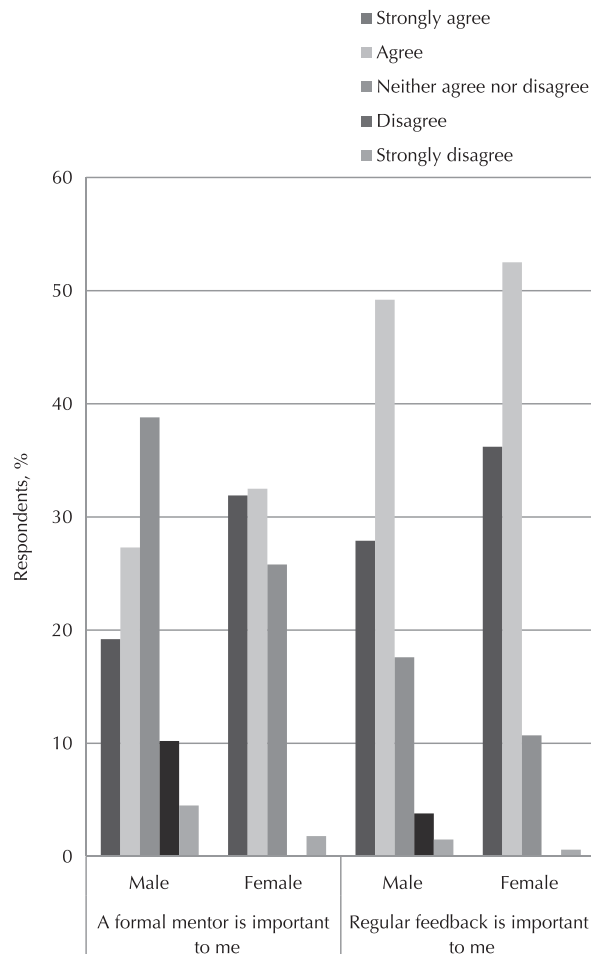


Figure 3. Importance of mentoring and feedback.

Mentoring and Feedback.—Significantly more women reported that they received formal mentoring (women, 37.4%, 61 of 163 versus men, 25.6%, 63 of 246; $P = .01$); however, significantly more women also indicated that having a formal mentor was important to them (women, 64.4%, 105 of 163 versus men, 46.5%, 114 of 245; $P = .002$). Women also more strongly agreed that receiving regular feedback about one's performance was important (women, 88.7%, 157 of 177 versus men, 77.1%, 202 of 262; $P = .002$) (Figure 3). Most women (80.6%; 87 of 108) and men (83.5%; 147 of 176) alike agreed ($P = .35$) that the feedback they do receive is generally useful. However, in dialogue with their supervisors, significantly fewer women agreed that their supervisors listened to what they have to say (women, 66.9%, 115 of 172 versus men, 75.5%, 197 of 261; $P = .04$). Women also less frequently agreed that their supervisor actively encouraged their career development (women, 62%, 106 of 171 versus men, 66.8%, 175 of 262; $P = .045$). One woman suggested that departmental leadership should "clearly state goals for achievement and career advancement... have regular performance evaluations, and provide mentorship." The importance of formal mentorship and regular feedback to male and female faculty is illustrated in Figure 3.

APC Survey

Respondents ($n = 104$) reported their race/ethnicity as follows: white, $n = 85$ (81.7%), African-American, $n = 1$

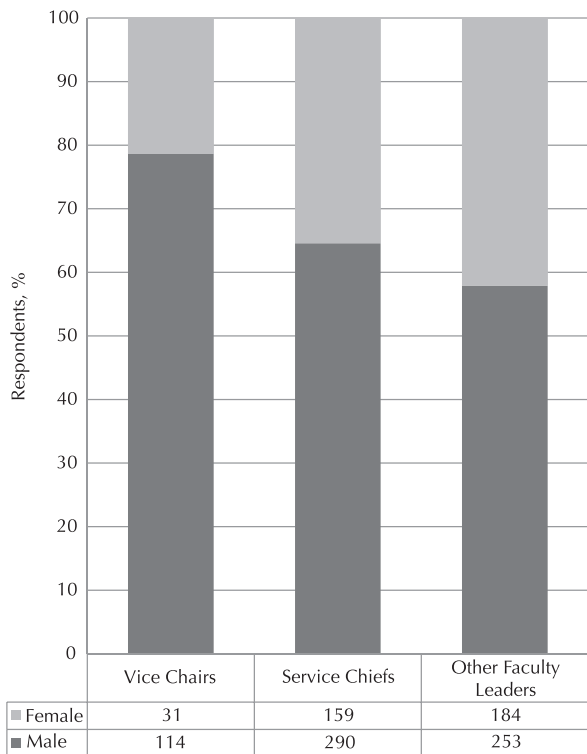


Figure 4. Distribution by sex of nonchair leaders in academic pathology.

(1.0%), Asian, n = 5 (4.8%), other/mixed, n = 1 (1.0%), not provided, 12 (11.6%). A majority of respondents (62 of 104; 59.6%) did not provide their sex. Of the 104 respondents who provided their sex, 33 identified as male (35.5%), and 9 (8.6%) identified as female. Twenty percent (21 of 104) reported serving as chair for 16 years or more, 18.3% (19 of 104) for 11 to 15 years, 21.2% (22 of 104) for 6 to 10 years, 21.2% (22 of 104) for 2 to 5 years, and 19.2% (20 of 104) for less than 2 years.

Not all survey questions were answered by every respondent. Ninety-three of the 104 respondents (89.4%) provided the sex of their vice chairs, service leaders, and other department leaders; those data appear in Figure 4. Ninety-two of the 104 survey respondents (88.4%) answered the question “Are you satisfied with the gender diversity among the leaders of your department?” Of the 92 respondents, 60 (65.2%) responded “yes,” 22 (23.9%) responded “somewhat,” and 10 (10.9%) responded “no.” As illustrated in Figure 5, respondents indicated the educational opportunities that they or their leadership mentees might find useful.

COMMENT

This AAMC FFES survey clearly demonstrates that career advancement is important to women in academic pathology. This survey did not specifically ask whether the respondent was interested in becoming a department chair as a career goal, so interest in that level of career advancement remains unknown. Women were, however, stronger in their agreement for the desire for career advancement than men were, perhaps because advancement has traditionally eluded them. These findings demonstrated considerable opportunity for academic pathology

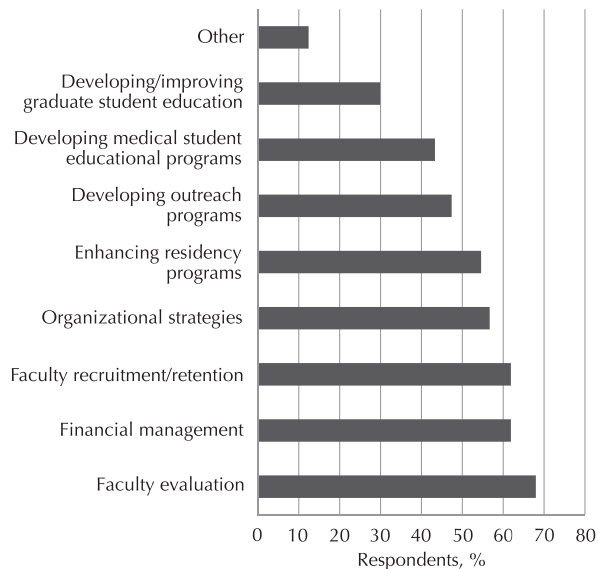


Figure 5. Interest by chairs in educational opportunities for development of future departmental leaders.

departments to increase their sex diversity and to better capitalize on the talents of the entire pathologist workforce. Women were generally satisfied with the pace of, and opportunity for, advancement, although more women reported disagreement regarding opportunities than men did, a minority view that may be valuable to explore.

Improving mentorship for female faculty in pathology may be an important strategic approach to addressing career advancement and opportunity because FFES results showed few women in the AAMC FFES survey report having a formal mentor and because a large percentage indicated that a formal mentor and regular feedback were important to them. This may represent a different faculty development approach than that traditionally seen as effective with male faculty. According to the FFES, men reported being more neutral on the importance of formal mentorship and disagreed more often that it was important. A recent survey¹⁷ of academic health centers with clinical translational science awards showed that there was considerable variability in mentorship programs across institutions, including mentor criteria, mentor-mentee relationship, incentives, and evaluative mechanisms. There are only a few published reports with quantitative outcomes measuring mentoring programs; those studies demonstrate the value of these programs. Junior faculty who participated in the University of California, San Diego, National Centers of Leadership in Academic Medicine, a 7-month program that includes a structured mentoring relationship with a senior faculty member, in addition to other activities, had a significantly higher retention rate, as well as academic success in leadership and professional activities.¹⁸ A mentored, investigator-training program for academic pharmacists, the Focused Investigator Training Program, was associated with a significant increase in attendees’ self-efficacy for obtaining external research funding.¹⁹ A national survey²⁰ of academic surgeons in Switzerland explored the career effect of mentoring and found a statistically significant, positive influence on the respondents who were in mentorship relationships.

Among faculty who reported spending more than 10% of their time in patient care activities, we found it interesting that the AAMC FFES showed differences by sex in total time spent per week on work activities, as well as the time or effort spent in research and patient care missions. Women traditionally have more child-care and family responsibilities than men do, which can limit a woman's time for work-related activities and can affect career advancement. A survey²¹ of medical faculty at University of California, Davis (UCD) found that institutional career flexibility options were used more often by women and were regarded as important to recruitment, retention, and advancement and that faculty of all generations and sexes were supportive of those policies. Concerns about burdening others and appearing less committed to their careers inhibited women, more often than men from accessing policies intended for support.²¹ Stone and Hernandez²² noted that professional women working flexibly were subjected to various forms of stigmatizing treatment, which had a role in their decision to suspend their careers. Destigmatizing the use of flexibility policies was highlighted as important to the careers of physician-researchers in a qualitative analysis by Strong et al,²³ and mentorship was seen as important to that process. Perceptions regarding barriers to the use of flexibility policies improved following an accelerator intervention at the University of California, Davis, which was designed to increase awareness of flexibility policies and to highlight support among all faculty for the policies.²⁴

Our analysis of the AAMC FFES also demonstrated that female faculty more frequently had less time for research than men did, and more than half of female faculty spent more than 40% of their time in patient care, far more than men. Because academic leaders are traditionally chosen from research-intensive faculty, women may be disadvantaged and more likely to experience a glass ceiling, limiting sex diversity at the leadership level. Mentorship could have an important role in that career dimension as well, to better develop women with research careers and to position more of them for potential upper-level positions. Alternatively, departments and their academic health centers may need to think more broadly regarding the experiences and skills necessary for leadership and not limit their focus to the pool with research-intensive careers.

Differences in perceptions by sex of department governance were also noted in the AAMC FFES. Women indicated more dissatisfaction with communication within the department, particularly regarding finances and clarity of priorities and with opportunities to participate in governance. Fewer women agreed that their chairs were good examples of organizational values. Previous research from AAMC FFES has shown that perceptions about governance are among the top drivers of overall satisfaction within a department. Department chairs, therefore, have a key role in ensuring satisfaction. Improving communication skills and skills surrounding strategic engagement may, therefore, be important to leadership development for future chairs, as well as for optimizing faculty satisfaction.¹⁵

Mentorship, career flexibility, opportunities for advancement and participation in governance, and work assignments all reflect the culture of the academic workplace. Culture can make a significant difference in the career success of academic faculty. Westring et al²⁵ found that the culture of the department or division had a crucial role in women's work-to-family conflict and could exacerbate or alleviate the effect of extremely high work demands. This

group²⁵ also created a validated measure of academic workplace culture for women, which is composed of 4 distinct, but related, dimensions: equal access, work-life balance, freedom from sex biases, and supportive leadership. Their pilot test among women assistant professors found evidence that women within departments/divisions agree on the supportiveness of their units but that substantial differences existed among units. This tool may be useful to departments in evaluating their own cultures and interventions for change.²⁶ At the University of California, Davis, compensation plans are seen as a strategic tool for enhancing the culture of flexibility. A compensation plan toolkit has been created as a resource for medical school departments; it contains suggested metrics that raise the visibility of an individual's contributions to organizational citizenship and teamwork. These metrics are intended to reduce stigma and bias related to flexibility because a faculty member's contributions may be strong, but less visible, because of an alternate work schedule, distance work, or leave taken.⁷

As our APC survey illustrates, substantial percentages of women are currently in nonchair leadership roles in academic departments of pathology, although women are still far from representing 50% of department leaders at any level and notably, relatively few women serve as vice chairs. However, women in these leadership roles indicate a significant pool of high-potential women who may be worthy of additional development as future department chairs, a leadership role that can even more profoundly influence a positive culture for women in academic medicine and science. Clearly, there is work to be done to groom the next generation of women as department chairs and other leaders and to improve the career satisfaction of all women in academic pathology. Although two-thirds of department chairs responding to the APC survey indicated that they were satisfied with the sex diversity of the leaders below them, the leaky pipeline from assistant professor to associate professor to full professor and the many issues highlighted by female faculty in the AAMC FFES demonstrated that neither pathology chairs nor faculty should be satisfied with the status quo.

Limitations to our study include the response rate of 66% for the AAMC FFES and 55% for the APC survey. No single standard has been established for physician surveys, and the response rate among academic pathologists reported here is slightly higher than previous published results from the AAMC FFES.¹⁵ The few participating institutions in both surveys could also be a limitation; however, both surveys included participants from public and private institutions, as well as those in all geographic regions, suggesting that the results are fairly representative of all academic pathology departments. The self-reported nature of the data from the AAMC FFES is also a potential limitation because responses may be biased based on perceptions of particular leaders in their departments or institutions. Selective memory, attribution, and exaggeration are also well-known as inherent sources of bias common to self-reporting and may, therefore, have a role in this study. The survey did not inquire about academic track of the respondents (ie, clinically intensive versus research-intensive positions); that could influence the observations from the survey, particularly in the "Defining Roles" domain. Consideration should also be given to the practical implication of the statistical differences seen in the AAMC FFES. Although statistically significant differences are noted in many domains, the

actual percentages are often very close. Lastly, the AAMC FFES' global satisfaction measures have been shown to predict responses of satisfaction and intent to leave in certain domains, but it has not yet been demonstrated whether those outcomes actually occur.¹⁵

In summary, the AAMC FFES demonstrates that women are interested in career advancement and many are assuming leadership roles within academic pathology departments. Significant areas of dissatisfaction among female faculty exist, which are different from those of men. Many of those differences reflect departmental culture, including opportunities for formal mentoring and feedback, communication and participation in governance, and the need to broaden definitions of experience necessary for leadership to reflect the areas in which women spend most of their time, such as clinical care. The pool of women available as potential department chairs appears strong, according to the APC survey, although few women are currently in chair positions, suggesting some sort of "glass ceiling" may exist. The findings from both surveys provide opportunities for department chairs to positively influence career development for women, career satisfaction, recruitment, and retention. We encourage department chairs and other leaders to use the information provided in this report to create interventions in their local departments to create a more-supportive culture that will enhance the development of female faculty in academic pathology. We also are strongly supportive of the APC's new Leadership Development and Diversity Committee, established in 2012, to support institutional chairs in developing more-diverse pools of faculty leaders. It is our hope that the APC, as well as other organizations, will use the findings from this report to raise awareness of the issues that form barriers to sex diversity in academic departments of pathology and to shape their own programming to address these issues on an even broader scale. We look forward to progress that will strengthen the future of academic pathology by developing and accessing the valuable talent of everyone within our discipline.

We thank Shannon Fox, PhD, Association of American Medical Colleges (AAMC), for her contributions to the methodologic design of this study. We also thank Fred Gorstein, MD, professor and chair emeritus of the Department of Pathology, Anatomy, and Cell Biology at the Kimmel Medical College of Thomas Jefferson University (Philadelphia, Pennsylvania), and Karen Novielli, MD, vice dean for faculty affairs at the Kimmel Medical College of Thomas Jefferson University and past chair of the Group on Faculty Affairs, AAMC, for their advice and review in the preparation of this manuscript.

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