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Generational and Gender Perspectives on Career Flexibility: Ensuring the Faculty Workforce of the Future

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There is growing national concern regarding the future adequacy of our physician workforce. The general population aged more than 65 years is predicted to double by 2030, and increased age is commonly accompanied by greater health care needs. The physician population also is aging; 1 in 3 active physicians is currently aged more than 55 years and likely to retire by 2020. A physician shortage is predicted by the Association of American Medical Colleges (AAMC).¹

Further affecting the physician workforce is the observation that physicians are choosing to work differently. Many publications in both medical and popular literature describe generational differences toward work. They describe younger workers as placing a higher value on family, career flexibility, and work–life balance than their predecessors.^{2–10} This difference is likely based on the different roles both sexes assume at work and at home. The Families and Work Institute (FWI) reports that more young men are assuming

Funding: National Institutes of Health award GM 088336 in partnership with the Office of Women's Health Research, with the goal of supporting "Research on Causal Factors and Interventions that Promote and Support the Careers of Women in Biomedical and Behavioral Science and Engineering," and the Frances Lazda Endowment in Women's Cardiovascular Medicine to ACV. National Institutes of Health trial registry number: GM 088336.

Conflict of Interest: None.

Authorship: All authors had access to the data and played a role in writing this manuscript.

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household and childcare duties than their counterparts 30 years ago, and more women want jobs with responsibilities similar to those of men. 11 The inherent challenges of balancing these demanding work and family roles create new stresses and conflicts for both sexes and provide insight into findings from the AAMC National Graduation Questionnaire, which shows a growing trend for medical graduates to choose specialties with more controllable work hours and little or no on-call duties. In addition, the questionnaire revealed more medical graduates opt for careers that do not involve the clinical practice of medicine at all, such as careers in the biotechnology and pharmaceutical industry or as consultants or entrepreneurs. 12 Minimizing work-life conflict also is not limited to the younger generation of physicians. Many hospitals and physician practices are finding it difficult to motivate physicians of all ages to take night and weekend call, even when additional compensation is provided for on-call coverage. 13,14 This trend among the older generation may reflect concerns about health, ability to meet changing family needs, burnout, or other changes in personal expectations as physicians mature and age.

The emerging issues surrounding work and family compound academic medicine's unique and long-standing challenges in recruitment and retention. In addition to the demands of patient care, which requires long work hours and on-call duties, a career in academic medicine includes considerable teaching demands and high expectations for research accomplishment and productivity. Economic pressures due to declining reimbursement for clinical ser-

vices, increased competition for research funding, and minimal (if any) compensation for teaching have exacerbated faculty stress, making academic careers seem less appealing to younger generations. A study at a major academic health center found that the average annual

turnover of new physician hires was 24%. Even more revealing were findings regarding retention: Only 55% of initial hires were still employed at this center 5 years later. 15 Replacing academic physicians is costly. Recruitment, training, and cost of the learning curve as new recruits ramp up their practice over 1 year can total more than \$200,000 per physician.¹⁶ It is critical to identify better strategies to improve recruitment, retention, and satisfaction of academic faculty.

Other industries and professions also are concerned about attracting and retaining talent. The generations following the baby boomers are smaller in number, and it is becoming harder to fill vacancies due to retirement. Career flexibility

has become a common primary recruitment and retention strategy. The Radcliffe Public Policy Center found a work schedule that allows time with family is one of the most important job characteristics to men and women aged 20 to 50 years. ¹⁷ At Deloitte & Touche, 86% of employees cited flexibility as the major reason for staying with the firm, leading to a savings of \$41.5 million in turnover costs alone. ¹⁸ For many years, the Alfred P. Sloan Foundation has provided awards to business and industry to promote career flexibility in the workplace. ¹⁹ Sloan's perspective is that flexibility is not an accommodation, but a strategic tool in recruitment and retention.

Career flexibility has not been a common strategic tool in academic medicine, but interest is growing. Flexibility policies are present at the majority of US medical schools, ²⁰ and a study of *US News & World Report* top 10-ranked medical schools shows that flexible career policies exist at each, but with considerable variation among the policies. ²¹ A task force of the Association of Specialty Professors recommended increasing respect for work–life balance and allowing flexible time and part-time employment. ²² An invitational conference on career flexibility sponsored by the Sloan Foundation in September 2010 demonstrated a keen interest among medical schools for help in enhancing career flexibility for their faculty.

This report illuminates generational issues toward career flexibility in academic medicine. We share the University of California, Davis School of Medicine (UCDSOM) career flexibility policies, how these were developed, and the findings from our recent survey

assessing faculty awareness of, attitudes to, and use of career flexibility policies. Our survey findings have uncovered vulnerable faculty groups who are at risk for work-life conflict. We highlight the impact that institutional policies can have in improving faculty satisfaction, recruitment, and retention for each generation. We believe that sharing our experience will allow departments and medical schools to create a more flexible work environment that will better meet recruitment and retention challenges, enhance faculty satisfaction, and more fully address the academic medical workforce needs of the future.

PERSPECTIVES VIEWPOINTS

- More than 83% of faculty of all generations and genders report that career flexibility policies enhance their career satisfaction, and 69+% of older faculty report that they might need these in the future.
- Younger men and older women are at risk for work-life conflict. They report the lowest satisfaction with career policies and with their careers overall.
- Considering generational perspectives and needs in developing, enhancing and communicating career flexibility policies can be an effective strategy for faculty recruitment and retention.

MATERIALS AND METHODS

Career Flexibility Policies at the University of California, Davis School of Medicine

The University of California, Davis and UCDSOM have long recognized the importance of career flexibility in faculty recruitment and retention and have been leaders in developing and implementing career flexibility policies. Flexible career policies to enhance work-life balance were first introduced at the University of California, Davis in 1988; however, health science schools, including UCDSOM, were excluded from these policies because of their unique differences in academic tracks, compensation structure, duties (clinical and teaching), and academic calendar. The then Associate Dean of Academic Affairs (LPH) worked collaboratively over several years with campus leadership and the University of California Office of the President to develop UCDSOM policies, including leave policies for childbirth, adoption, child rearing, and other family needs, such as elder care and opportunities for part-time work (**Table 1**). In addition, there are other flexibility policies that include opportunities for tenure clock extension and deferral of academic reviews. All of these policies have been described in a recent publication²³ and are available on a dedicated page of UCDSOM's website.²⁴ The UCDSOM career flexibility policies are designed to support faculty in all academic tracks (tenure track and nontenure track, and

	Leaves			Reduced Duties	
	Childbearing Leave or Adoption	Family Medical Leave	Parental Leave	Active Service Modified Duties	Part-time Appointment
Who	Faculty member giving birth or adopting parent with > 50% care responsibility of child aged < 5 y	≥1 y University service, 50+% responsibility for family care	Any faculty member	≥1 y University service, 50+% responsibility for family care	At chair's discretion with consideration of academic and business needs
Time/duration	Full-time leave for 12 wk maximum	Full-time leave for 12 wk maximum	Full-time leave, 1 y maximum, inclusive of other leaves	Negotiated part-time leave for 12 wk maximum	Negotiated percent reduction, renewable at time of reappointment
Salary	Full salary (base and differential components)	None	None	Full base salary, proportional reduction in differential salary	Base and differential salary components reduced proportionate to time
Healthcare benefits	Maintained	Maintained	None	Maintained	Full if > 50% appointment

academic senate vs nonsenate) over their life course. These policies were implemented uniformly throughout the school beginning in 2004 and served as the model for new policies implemented across all 10 University of California campuses in January 2006.²⁵

Eliminating inequities across departments and faculty tracks was a major goal in developing the school's career flexibility policies. Before 2004, each department defined its own leave policies within their compensation plans. As a result, there was considerable variation among UCD-SOM departments. Some "wealthy" departments offered longer leave benefits or more compensation than less wealthy departments, and departments with few women offered minimal childbearing leaves compared with departments with more women. Furthermore, faculty appointed in different academic tracks were assigned different benefits by some departments. Providing uniform benefits for flexible career policies across all the departments and faculty tracks in the school was intended to increase faculty satisfaction, eliminate feelings of "second class citizenship," and enhance the culture of "oneness" that the school values.

Faculty Survey

In 2010, we surveyed the UCDSOM faculty regarding their attitudes, awareness, and use of career flexibility policies using a confidential, 53-item, web-based survey as part of the first phase of a larger 4-year intervention study funded by a grant from National Institutes of Health and the Office of Women's Health Research (NIH-OWHR). The survey assessed our faculty's 10-year experience with use and intention to use these policies, their awareness of policies (for leaves for mothers/fathers, personal disability, tenure clock stoppage, part-time appointments), perceived barriers to use of these policies, and career satisfaction, and included demographic information, including faculty

sex, age, race, ethnicity, and marital and parental status. The survey development and design, as well as statistical analysis of the results, have been reported.²³ The response rate was 42% with 325 of 779 faculty participating in the survey. The respondents were consistent with the distribution of our faculty in multiple demographic dimensions, including age, sex, academic track, rank, series, and years on faculty, and also have been described in more detail.²³

We evaluated the survey findings by both sex and generation. For the purpose of survey analysis, we divided the faculty into 2 generations using definitions provided by Strauss and Howe: an older generation born in 1960 or earlier (baby boomers) and the younger generation born in 1961 or later (generation x). We have previously shown that our faculty consists chiefly of these 2 generations: Approximately 50% are baby boomers (birth years 1945-1960), and 45% are generation Xers (birth years 1961-1981). We did not distinguish the members of the traditional generation because they represent approximately 5% and have decreased in number since our previous report. The millennial generation is still in training and has not yet increased to faculty positions.

Policy awareness was scored on a 1 to 5 scale where 1 = unaware of policy and 5 = very familiar with details of the policy. An overall family-friendly policy awareness score was calculated as the simple average of awareness of 5 specific policies. Percentages are reported for questions regarding self-reported use of policies. The denominators for these calculations include only individuals who answered yes or no to the questions, excluding individuals who said it did not apply to them or left the questions blank. Several types of questions assess attitudes about the impact of family-friendly policies on satisfaction. Ordinal scale questions were scored from 1 to 5, where 5 = highly satis-

fied or strongly agree and 1 = highly dissatisfied or strongly disagree. Binary questions (agree/disagree) regarding satisfaction are reported as the percentage of individuals reporting agreement (individuals who left the question blank were excluded from the denominator). Questions regarding barriers to use were presented as check boxes, so the denominators used to calculate the percentages include all survey responders in each group because "not applicable" was not an option. P values are provided from linear regression models for continuous outcomes and logistic regression models for binary outcomes for the effect of sex, generation (age), and the interaction between sex and generation (age) on each topic.

RESULTS

The demographics of the survey respondents were consistent with the overall demographics of our school. The majority of survey respondents held full-time appointments. As expected, the older respondent group had fewer women, more full professors, and longer periods of employment at UCDSOM (Table 2). By comparing the older and younger generations of both sexes, the majority of the younger respondents were in clinical tracks as clinician-investigators or clinicianeducators. In contrast, the majority of older respondents were in the tenure track or in another of University of California's other 2 research-intensive nontenure-track series. This generational difference also was true when analyzing strictly women. Definitions of the academic series and their general use at UCDSOM have been reported.²⁶

Faculty attitudes toward policies are shown in Figure 1. Both generations responded that family-friendly policies are important for recruitment and retention, but the level of importance was significantly higher among female respondents than male respondents (sex P =.01). All faculty indicated that family-friendly policies are important for career advancement, although the level of importance was marginally more significant for women and the older generation (sex P = .06, age P =.06). There was no age or sex association with worklife balance satisfaction. All faculty, regardless of sex or age, reported being fairly satisfied with the ability of policies to meet their needs, although the level of satisfaction was highest for younger women (3.7/5.0, age: sex P = .02). Younger women and older men reported the highest levels of overall satisfaction, and younger men reported the lowest level of satisfaction (sex:age P = .04). The majority of faculty agreed that having family-friendly work-life balance policies increases their satisfaction in having a career at UCDSOM, even though they may not use these policies (83%-99%) (Figure 2), with no significant differences among sexes or age groups. Significantly more young people and more female respondents agreed that having familyfriendly policies increased satisfaction because they may need to use policies (sex P = .02, age P = .01), although agreement was generally high for both generations and sexes. Concern about reactions by colleagues to use of policies was fairly high (36%-58%) with no significant difference between generations or sex

Policy use appears in Figure 3. Reported use of policy was low for all age groups, although younger women reported significantly more use of at least 1 family-friendly benefit than any other cohort (sex:age P = .03). As would be expected, the cohort of younger women reported using childbearing leave more than any other group (sex:age P = .02). There was a marginally significant interaction between sex and age, with women more likely than men to report wanting to use a policy but choosing not to, and older women more likely than younger women to report this (sex P = .002, age P = .01, and sex:age P = .06) (Figure 3). A substantial percentage of faculty respondents of both generations and sexes reported that they took time off, but thought they did not take as much time off as they wanted. There were significant sex and age effects in this response. Almost all of the older men (92%) and more of the older generation in general reported this opinion (sex P = .03, age P = .02). Significantly more women than men reported reducing their working hours (sex P = .02). There were no significant differences in use between the sexes or generations of modified duties, extension of the tenure clock, and deferral of reviews. Few faculty of either age group or gender reported that they had ever been denied policy use. The highest reported denials (12%) were among older women, perhaps reflecting requests when the culture was less supportive.

Awareness of policies is generally low (Figure 4), although the older generation had significantly greater awareness of policies, both on average (age P = .005) and for each individual policy. There were no significant overall gender effects seen in awareness, but sex significantly modified the effect of age on awareness of childbearing leave, with men in the younger cohort being least aware (sex:age P = .05). Some 10% to 30% of faculty reported factors preventing their use of policies, although none of these factors stood out as dominant. Younger women more often reported concern about using policies because it could make them appear less committed, might burden colleagues, or lead to heavier assignments later; however, there were no statistical differences between generations or sex in the frequency of these concerns.

DISCUSSION

Our survey has provided a unique window into the faculty, bringing to light important similarities and differences in attitudes, awareness, and use of career flex-

Table 2	Demographics of Survey Responders Compared with All Faculty
	Survey Perpendents

	Survey Respond		
	<50 y N (%)	50+ y N (%)	All Faculty N (%)
Total	181	144	779
Gender			
Female	78 (45)	42 (29)	244 (31)
Male	94 (55)	101 (71)	535 (69)
Ethnicity			
Hispanic	7 (4)	6 (5)	_
Race			
Caucasian	109 (69)	121 (88)	_
African-American	3 (2)	1 (1)	_
Asian	47 (30)	15 (11)	_
Rank			
Assistant Professor	94 (55)	5 (3)	317 (41)
Associate Professor	51 (30)	26 (18)	170 (22)
Professor			
Rank among women			
Assistant Professor	51 (65)	2 (5)	136 (56)
Associate Professor	22 (28)	10 (24)	51 (21)
Professor	5 (6)	30 (71)	57 (23)
Series	, ,	, ,	, ,
Tenure track	31 (18)	63 (44)	213 (27)
Other research-intensive	37 (21)	22 (15)	133 (17)
series	, ,	, ,	, ,
Clinician-investigator	56 (33)	38 (26)	218 (28)
Clinician-educator	46 (27)	20 (14)	215 (28)
Don't know	1 (1)	1 (1)	0 (0)
Series among women			
Ladder-rank	16 (21)	11 (26)	54 (22)
Other research-intensive	15 (19)	6 (15)	42 (18)
series			
Clinician-investigator	23 (29)	16 (38)	69 (28)
Clinician-educator	24 (31)	9 (21)	79 (32)
Don't know	0 (0)	0 (0)	0 (0)
Appointment			
Part-time	11 (6)	8 (6)	_
Full-time	160 (93)	134 (93)	_
Other Other	1 (1)	2 (1)	_
Length of appointment (y)	. ,		
≤5 y	98 (57)	18 (12)	_
6-10 y	46 (27)	32 (22)	_
11-15 y	20 (12)	22 (15)	_
16-20 y	5 (3)	28 (20)	_
>20 y	4 (1)	44 (31)	_

ibility policies, and how they are influenced by generation and sex. Many of these findings were not as we expected on the basis of previously published reports of generational differences and our own cultural assumptions. Our survey demonstrated a high level of support for career flexibility policies among all faculty groups, which surprised us because many of the flexibility policies address needs associated with childbirth and childcare that do not pertain as frequently or directly to

faculty aged more than 50 years, particularly male faculty. The older generation may simply be interested in ensuring that the school can continue to recruit and retain talented younger faculty to share the workload. However, we believe that the reasons are deeper, more altruistic, and reflect genuine concern for younger colleagues because of the team-based values at the core of academic medicine and medical education. An academic health center is inevitably a multigenerational

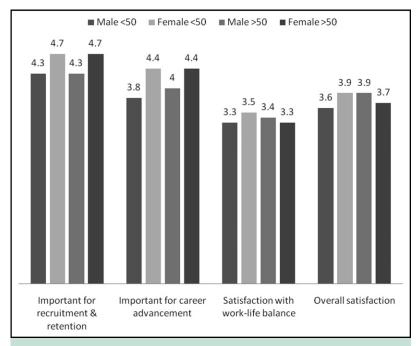


Figure 1 Faculty attitudes regarding flexible career policies: importance and satisfaction. Rated on a scale of 1 to 5 (1 = low, 5 = high).

team environment because of the presence of junior and senior faculty, as well as learners. We surmise that the positive and supportive responses by the older faculty are derived from their own challenging experiences during the early part of their own careers. Of note, a large percentage of older faculty reported that they did not take as much time off for family or personal needs as they thought they needed. The older faculty, particularly the men, may be reflecting on this experience, and thus more interested in supporting those who fol-

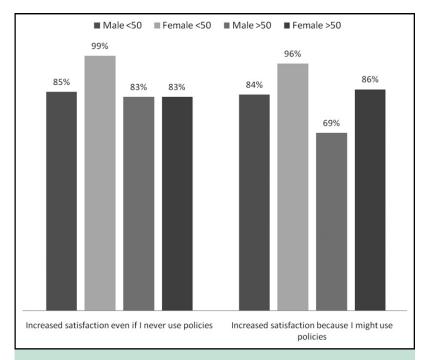


Figure 2 Percentage of faculty reporting high satisfaction based on policy use or anticipated use.

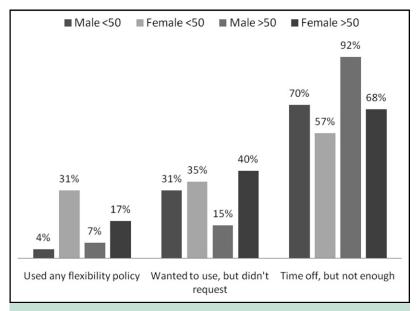


Figure 3 Reported experience of faculty with flexible career policies (% of respondents).

low them. Similar attitudes may explain the majority of faculty who agreed that having family-friendly work—life balance policies increased their satisfaction in having a career at UCDSOM, even if they did not anticipate using these themselves. We find it particularly notable that a majority of older men also agreed with this statement, because the many policies support child-bearing and child rearing, which do not frequently pertain directly to this group.

Likewise, a survey of senior male Fortune 500 executives also demonstrated a high level of support for company career flexibility. Fifty percent of these senior male executives wondered if the sacrifices that they had made for their careers were worth it, and 87% believed that enabling flexibility options would give their company a competitive advantage in attracting and retaining talent.²⁷ All of these findings fit Strauss and Howe's concept of the aging baby boomers as "wise elders" guiding the younger generation.

Lack of awareness of career flexibility policies is a significant barrier to policy use in our school. Increasing awareness is therefore a major goal of our work. Our survey revealed that there are other barriers to policy use that need to be addressed to create a culture

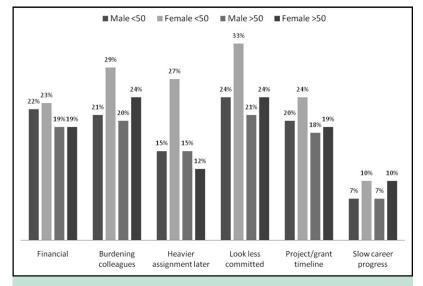


Figure 4 Percentage of faculty respondents reporting perceived barriers to use of flexible career policies.

of flexibility. Although no single reason stood out as a major barrier to policy use, one of the most common reasons cited by both generations and genders was fear of repercussions, including concern that the individual using the policy would be perceived as less committed to a career and would adversely affect academic advancement. Studies have shown that passive "face time" (ie, the amount of time one is passively observed without interaction) can affect how an employee is perceived at work.²⁸ We are concerned that a workplace that favors face time may thwart a true culture of flexibility by inhibiting use of our school's policies, many of which involve leaves that decrease face time. A bias toward face time also may adversely affect the adoption of other tools and technologies to enhance flexibility, such as telemedicine and remote work via the electronic medical record, each of which is available and encouraged at UCDSOM. Faculty members who experience less face time because of their use of flexible career policies and technology may unwittingly be at a disadvantage in the current academic work model.

One striking result of this survey was the frequency of cross-effects, where younger men and older women appeared least satisfied with flexible career policies and showed lower overall satisfaction than the other groups. This survey brought to our attention vulnerable at-risk faculty groups previously unrecognized within our school and not typically seen as at-risk groups or diversity targets at other medical schools nationally. We see the unmet needs of young men and older women as potentially significant threats to a successful academic medical workforce if left undiscovered and unaddressed. The issues raised in our survey for these 2 faculty groups is consistent with 2 reports on changing generational and gender trends released by the FWI in 2011^{11,26} and received considerable attention as a *Time* Magazine²⁹ cover story. Approximately one half of men surveyed by the FWI report significant work-life conflict today, whereas only one third reported this problem 30 years ago. In addition, the FWI reports that work-family conflict is more commonly reported by fathers in dual-income couples, and that this problem has doubled compared with 30 years ago. Women have not shown these dramatic changes. This growing conflict among young men likely reflects the increased responsibility that fathers are assuming in families and households, which includes more childcare.

Increasing work–family conflict among men is viewed as a symptom of the "new male mystique" or "the new dad," a phenomenon in which the traditional cultural view of a man as the career-focused primary breadwinner conflicts with the new role as an equal participant in family life and that is exacerbated by nonsupportive workplace cultures. ^{27,30} We note that the factors identified by the FWI as placing men at high risk for work–family conflict

typify careers in academic medicine: working more than 50 hours per week, a "high demand" job, and an emphasis on working increasingly harder and faster, as is often the case with declining reimbursements and growing emphasis on productivity. In addition, there are personality characteristics that predispose an individual to work–family conflict that we believe also are common among many men in academic medicine: a work-centric attitude that prioritizes work over family, traditional gender role values, and having children at home aged less than 18 years. Given these trends, we believe that medical schools, including ours, will increasingly need to recognize and address these new gender-specific challenges to recruitment, retention, and faculty development.

Older women also emerged from our survey as a vulnerable faculty group. Older women reported a low level of career satisfaction related to work-life balance that was similar to the reports of young men. Older women reported high satisfaction knowing that familyfriendly policies exist because they might want to use them in the future. Because this group is not likely to be using policies for childbirth or child-rearing purposes, we think the response may reflect the growing role of older women faculty as caregivers to elderly family members. According to an FWI study examining elder care,³¹ working women provide almost twice as much elder care than men, averaging 9 hours per week. This discrepancy causes the majority of working caregivers to think that they do not have enough time for their children, their spouse/partner, or themselves. The potential for work-life conflict is significant because virtually all of respondents reported a negative effect on their work and difficulties managing their responsibilities. These findings are particularly pertinent to medical school faculty since the FWI found that working professionals are more likely to be working caregivers.31 The caregiving issue may loom even larger for the younger generation because they will need to care for their aging baby boomer parents, a large segment of the population who has fewer children to share in the caregiving. These issues are important to consider when schools and departments develop and implement policies for career flexibility.

Providing high-access career flexibility has been recommended by the FWI,²⁷ the Sloan Foundation, and others as a recommended strategy to avoid work–family conflict; we concur with these recommendations on the basis of our own survey findings. We emphasize the importance of making workplace flexibility sex and age neutral because fathers and older faculty are taking on increasing family responsibilities but are reluctant to ask to use flexibility policies, both in our study and others.³⁰ Such efforts are important to create the culture of flexibility that a modern workplace, including academic health centers and schools of medicine, needs to encourage.

Study Limitations

Limitations to our study include the fact the data were collected from the faculty of one medical school and may not be generalizable to all medical schools. However, the demographics for gender and rank within our school and our respondents are similar to data for medical schools reported by the AAMC, although we have slightly more women who are associate professors and slightly fewer women who are full professors.³² The AAMC does not provide data on age or generation. A second potential limitation is the moderate response rate (42%), although it meets the required response rate by the Sloan Foundation for their flexibility awards (including their upcoming awards to medical schools) and is generally considered to be a good response rate for survey-based studies.

This survey represents baseline information for an interventional study funded by the NIH-OWHR exploring how flexibility policies can influence women's careers in biomedical science. The next steps in our NIH-OWHR-funded study include educational interventions to increase awareness and use of these policies and address barriers. Our interventions have been tailored to the findings in this baseline survey to address barriers to policy use, enhance respect for flexibility, and diminish bias, including bias related to less "face time." These interventions include educating faculty through a variety of communication tools, including newsletters, grand rounds, and workshops, to demonstrate that colleagues of all generations and sexes value, support, and need flexibility. We believe that these efforts are an important step in enhancing policy use, eliminating barriers and fear of repercussions, and creating a culture of flexibility that is sex and age neutral. We also are targeting special workshops and other communications aimed to reach high-risk groups, such as young men and older women, because findings from our study and others demonstrate that these groups experience more work-family conflict and lower career satisfaction. During the next 3 years, we will re-survey to evaluate change in knowledge, awareness, and policy use and to assess effects on barriers, satisfaction, academic reviews, and advancements.

CONCLUSIONS

We have found that faculty of all ages value and need flexible career policies, and report that these policies enhance their own satisfaction in the workplace. Key differences between generations and sexes provide important insights into high-risk groups and highlight areas for improvement, including targeting faculty education to increase awareness and use. We recommend that other schools develop and enhance their own policies through consideration of generational perspectives. We also recommend that schools specifically explore interventions for younger men and older

women, groups that may otherwise go unnoticed but seem particularly vulnerable for work-life conflict. We are confident that these efforts will improve faculty satisfaction and address the looming workforce challenges facing academic medicine, including attracting and retaining top talent.

ACKNOWLEDGMENTS

The authors thank Cris Warford, BS, Kellie Wheeler, BS, and Kristin Dang, BS, for technical assistance in the conduct of these studies.

References

- Salsberg E, Grover A. Physician workforce shortages: implications and issues for academic health centers and policymakers. *Acad Med.* 2006;81:782-787.
- Borges NJ, Manuel RS, Elam C, Jones BJ. Differences in motives between Millennial and Generation X medical students. *Med Educ*. 2010;44:570-576.
- Howell LP, Joad JC, Callahan E, Servis G, Bonham AC. Generational forecasting in academic medicine: a unique method of planning for success in the next two decades. *Acad Med.* 2009; 84:985-993.
- Borges NJ, Manuel RS, Elam C, Jones BJ. Comparing Millennial and Generation X medical students at one medical school. *Acad Med.* 2006;81:571-586.
- Howell LP, Bonham AC, Servis G. Multigenerational challenges in academic medicine: UCDavis's responses. *Acad Med.* 2005; 80:527-532.
- Bickel J, Brown AJ. Generation X: implications for faculty recruitment and development in academic health centers. *Acad Med.* 2005;80:203-204.
- Jacobsen CC, Resneck JS Jr, Kimball AB. Generational differences in practice patterns of dermatologists in the United States: implications for workforce planning. *Arch Dermatol.* 2004;140: 1477-1482.
- Asante EO. Managing in the generation gap. Radiol Manage. 2001;23:48-49.
- 9. Strauss W, Howe N. *The Fourth Turning*. New York: Broadway Books; 1997.
- Howe N, Strauss W. The next twenty years: how customer and workforce will evolve. Harv Bus Rev. 2007;85:41-52.
- 11. Galinsky E, Aumann K, Bond JK. Times are changing: gender and generation at work and home. 2008 Study of the National Study of the Changing Workforce, Work and Family Institute. Available at: http://www.familiesandwork.org/site/research/ reports/Times_Are_Changing.pdf. Accessed November 10, 2011
- Jeffe DB, Andriole DA, Hagerman HL, Whelan AJ. The changing paradigm of contemporary US allopathic medical school graduates' career paths: analysis of the 1997-2004 national AAMC Graduation Questionnaire database. *Acad Med.* 2007;82: 888-894.
- Lin GA, Beck GC, Stewart AL, Garbutt JM. Resident perceptions of the impact of work hour limitations. J Gen Int Med. 2007;22:969-975.
- Krueger KJ, Halperin EC. Perspective: paying physicians to be on call: a challenge for academic medicine. *Acad Med.* 2010;85: 1840-1844.
- 15. Waldman JD, Arora S. Measuring retention rather than turnover. *Human Resources Planning*. 2004;27:6-9.
- Waldman JD, Kelly F, Arora S, Smith HL. The shocking cost of turnover in healthcare. Healthcare Manage Rev. 2004;29:2-7.

- Radcliffe Policy Center with Harris interactive. Life's Work: Generational Attitudes Toward Work and Integration. Cambridge, MA: Radcliffe Public Policy Center; 2000.
- Corporate Voices for Working Families. Business impact of flexibility: an imperative for expansion. WFD Consulting Research. A Corporate Voices for Working Families Report, November 2005; http://www. cvworkingfamilies.org/publication-toolkits/business-impacts-flexibilityimperative-expansion-november-2005. Accessed May 21, 2012.
- Economic performance and way of life: Workplace, workforce, and working families. Alfred P. Sloan Foundation. Available at: http://www.sloan.org/program/32. Accessed January 8, 2010.
- Bunton SA, Corrice AM. Evolving workplace flexibility for U.S. medical school tenure-track faculty. Acad Med. 2011;86:481-485.
- Bristol MN, Abbuhl S, Cappola AR, Sonnad SS. Work-life policies for faculty at the top ten medical schools. *J Womens Health*. 2008;17:1311-1320.
- 22. Linzer M, Warde C, Alexander RW, et al; Association of Specialty Professors Part-Time Careers Task Force. Part-time careers in academic internal medicine: a report from the association of specialty professors part-time careers task force on behalf of the alliance for academic internal medicine. Acad Med. 2009;84:1395-1400.
- Villablanca AC, Beckett L, Nettiksimmons J, Howell LP. Career flexibility and family-Friendly Policies: an NIH funded study to enhance women's careers in biomedical sciences. *J Women's Health*. 2011;20:1485-1496.
- Family-friendly career flexibility policies. Available at: www.ucdmc.ucdavis.edu/academicpersonnel/academicleaves.html. Accessed November 10, 2011.
- Academic Personnel Manual Policy 760 Family Accommodations for Childbearing and Childrearing. Available at: http://www.ucop.edu/ acadadv/acadpers/apm/apm-760.pdf. Accessed November 10, 2011.

- Howell LP, Bertakis KD. Clinical faculty tracks and academic success at the University of California medical schools. *Acad Med*. 2004;79:250-257.
- 27. Aumann K, Galinsky E, Mattos K. Times are changing: gender and generation at work and home. 2008 Study of the National Study of the Changing Workforce, The New Male Mystique. Available at: http://www.familiesandwork.org/site/research/ reports/newmalemystique.pdf. Accessed November 10, 2011.
- Elspach KD, Cable DM, Sherman JW. How passive 'face time' affects perceptions of employees: evidence of spontaneous trait inference. *Human Relations*. 2010;63:735-760.
- Gibson MJ. Why men and women should end the chores wars. *Time Magazine*. July 21, 2011. Available at: http://newsfeed. time.com/2011/07/21/time-cover-story-why-men-and-women-should-end-the-chore-wars/. Accessed November 10, 2011.
- Harrington B, Van Deusen F, Ladge J. The new dad: exploring fatherhood within a career context. Boston College Center for Work and Family, 2010. Available at: http://www.bc.edu/content/ dam/files/centers/cwf/pdf/BCCWF_Fatherhood_Study_The_New_ Dad1.pdf. Accessed November 10, 2011.
- 31. Aumann K, Galinsky E, Sakai K, Brown M, Bond JK. The elder care study: everyday realities and wishes for change. 2008 Study of the National Study of the Changing Workforce, Work and Family Institute. Available at: http://familiesandwork.org/site/research/reports/elder_care.pdf. Accessed November 10, 2011.
- 32. Women in academic medicine: Benchmarking and statistics, Table 3, Distribution of full time faculty by department, rank and gender. Available at: https://www.aamc.org/members/gwims/ statistics/. Accessed January 25, 2012.