Career Experiences and Perceptions of Underrepresented Minority Medical School Faculty

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Background: Although studies have outlined the benefit of diversity in academic medicine, the number of underrepresented minority (URM) faculty remains low. In 1998, University of California, San Diego (UCSD) School of Medicine with the Hispanic Center of Excellence began a formalized proactive faculty development program. Over the past 10 years, recruitment and retention of URM junior faculty have increased. We undertook a study to explore factors associated with this improvement.

Methods: Semistructured interviews were conducted with 18 out of 26 URM and 12 out of 26 randomly chosen non-URM assistant and associate faculty members throughout 2005. Interview content, based on a conceptual framework from Joanne Moody, included career path, knowledge and experience with faculty development programs and perceived faculty standing.

Results: URM faculty were more likely than majority faculty (44% vs. 8%, p=0.04) to mention the importance of a role model in choosing their career path. URM faculty participated in faculty development programs at a higher rate than majority faculty (78% vs. 17%, p<0.001), were more likely to find out about programs through personal contact (94% vs. 42%, p=0.001) and reported more personal contacts prior to participation (78% vs. 33%, p=0.02). URM faculty were older, graduated earlier and were more likely hired into a staff position prior to faculty appointment (61% vs. 17%, p=0.02).

Conclusions: Academic medical centers may find competitive URM candidates in staff positions and alternative faculty tracks within their institution. Informing URM faculty often and personally about opportunities for faculty development may increase their participation in career development programs and improve retention.

Key words: minority health ■ education ■ mentoring

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lthough several studies have outlined the need for and benefits of diversity in academia, the number of underrepresented minority (URM) faculty in academic health centers remains low. As of December 31, 2004, the Association of American Medical Colleges (AAMC) faculty roster reported a total of 114,087 faculty members at U.S. medical institutions. Of these 71.9% were white, 12.6% Asian and 7.2% URM (Hispanic/Latinos, African Americans, American Indians/Alaska natives and native Hawaiian/other Pacific Islanders). This database includes faculty at medical institutions associated with the historically black colleges and universities of Howard, Meharry and Morehouse, as well as the Hispanic-serving health professions schools of Ponce, University of Puerto Rico and Universidad Central del Caribe in Puerto Rico. If faculty at these three historically black and three medical institutions in Puerto Rico are excluded from this calculation, the percentage of URM faculty in the remaining 120 U.S. schools of medicine would be lower than the 7.2% quoted in the 2004 report.^{1,2}

Not only are URM faculty few in number, but Hispanics, African Americans, Asians, American Indians/ Alaska natives and native Hawaiian/other Pacific Islanders are primarily concentrated at the rank of assistant professor, whereas non-Hispanic whites are concentrated at the level of full professor. In addition, in the 2000 article "Specialty Choices, Compensation and Career Satisfaction of Underrepresented Minority Faculty in Academic Medicine," Palepu and colleagues found that URM faculty have significantly lower adjusted career satisfaction scores and more often report that they are considering leaving academic medicine within 5 years. This finding persisted despite adjustments for rank, compensation, department and professional time allocation. The investigators concluded that URM faculty members are

less satisfied with their careers and more likely to leave academic medicine.

In 1998, in order to increase the academic success rate of all junior faculty, the University of California, San Diego (UCSD) National Center for Leadership in Academic Medicine (NCLAM) in collaboration with the Hispanic Center of Excellence (HCOE) designed a formalized, proactive faculty development program that emphasized an understanding of the institution's mission and culture. 4,5 A recent study on the retention rate of URM faculty at UCSD School of Medicine (SOM) found that the implementation of the NCLAM faculty development program is associated with an increase in the retention rate of URM junior faculty in the SOM and in academic medicine.6 The present study explores reasons behind this improvement. Specifically, the present study describes UCSD SOM's URM faculty career experiences and perceptions of mentoring, faculty development programs and their "fit" in the academic environment, and compares them to non-URM faculty.

METHOD

As of January 2005, there were 450 assistant and associate-level faculty at the UCSD SOM. All of the 26 assistant- and associate-level URM faculty were invited to participate, as well as 26 non-URM faculty (selected via a random numbers table). A semistructured interview was conducted in person (or by phone if requested) by 1 of the 3 authors, who took notes during the interview. Demographic data (age, gender, year of graduation, degree, date of hire at UCSD and level of appointment) was obtained using standardized questions.

Information on experience and perception of mentoring, faculty development programs and the interviewee's "fit" in the academic environment was obtained using identical open-ended questions based on a conceptual framework from Joanne Moody.⁷ Approximately 20

questions covered 4 content areas: knowledge of faculty development programs, support/barriers to participation, perception of professional life and suggestions on improving faculty development. Key questions included: 1) What prompted your interest in academic medicine/research? 2) How did you find out about faculty development activities/programs? 3) Do you feel your goals and expectations match UCSD's? The 3 authors jointly reviewed all interview notes and identified key responses. All interviews were then coded using these responses and representative quotations identified.

Sociodemographic characteristics, knowledge and experience with career development, and perceived faculty standing were compared for URM and non-URM faculty respondents. Differences in proportions were tested for statistical significance utilizing the z statistic, with p values based on 2-tailed probability. An independent-samples t test was used to test for differences in age and year of graduation between URM and non-URM respondents. Again, p values reflect 2-tailed probability.

This study was approved by UCSD Human Research Protections Program.

RESULTS

A total of 18 out of 26 URM faculty (69%) and 12 out of 26 non-URM faculty (46%) agreed to participate. Men and women were equally likely to participate (58% and 57%, respectively), as were those with an MD or other degree (58% and 56%).

URM faculty included 11 Hispanics, 5 African Americans, 1 American Indian and 1 Pacific Islander. As summarized in Table 1, URM faculty participants were significantly older than non-URM faculty (mean 42 versus 37 years, p=0.02) and had graduated earlier (mean 1990 versus 1994, p=0.04). There were a higher number of men and MD degrees in both groups; however, there were no significant differences between URM and

	URM (n=18) Mean (Range)	Non-URM (n=12) Mean (Range)	P Value ¹
Age (Years) Graduation (Year)	42 (35–52) 1990 (1983–1999)	37 (29–45) 1994 (1985–2002)	0.02 0.04
	n (%)	n (%)	P Value ²
Gender			
Women	8 (44)	4 (33)	0.54
Men	10 (56)	8 (67)	
Degree	• •	• •	
MD	13 (72)	8 (67)	0.74
PhD, MD/PhD	5 (28)	4 (33)	
Position at Hire			
Faculty	7 (39)	10 (83)	0.02
Nonfaculty	11 (61)	2 (17)	

non-URM faculty. URM faculty were significantly more likely than non-URM faculty to be hired to a staff position prior to receiving their faculty appointment (61% versus 17%, p=0.02), which may explain the differences in age and year of graduation.

When asked about their student experiences, URM faculty were significantly more likely than non-URM faculty to mention a role model prompted his/her interest in academic medicine (44% versus 8%, p=0.04). URM faculty were also more likely to have participated in a development program as a student, although this difference was not statistically significant (28% versus 8%, p=0.19) (Table 2).

While there was no significant difference in awareness of faculty development programs (89% URM versus 75% non URM, p=0.32), URM faculty were significantly more likely than non-URM faculty to have participated in faculty development programs (78% versus 17%, p<0.001). Twelve URM faculty participated in UCSD's NCLAM, 2 in the HCOE program, 2 in the K30 program Clinical Research Enhancement through Supplemental Training (CREST) and 9 in other local and national programs. One non-URM faculty had participated in CREST and 1 in a national program. URM faculty were significantly more likely than non-URM faculty to have found out about development programs through personal contact (94% versus 42%, p=0.001). In-person contacts included mentors, peers and program directors. URM faculty were also significantly more likely than non-URM faculty to have received multiple contacts about faculty development programs (78% versus 33%, p=0.02).

URM faculty were less likely to report they "fit in well" in their department (50% versus 83%, p=0.06) (Table 2). However, the majority of both URM and non-URM faculty reported that their goals and expectations matched the goals and expectations of UCSD (78% and 92% respectively, p=0.32).

DISCUSSION

Given the increased recruitment and retention of URM faculty at the UCSD SOM, we have here described the URM view of faculty development at UCSD, in the hope that this information could inform those who would like to increase and better support URM faculty at their institutions. These findings support the recognized strategy of expanding the search for qualified candidates for faculty positions.

In this study, URM faculty at UCSD tended to be older, graduated earlier and were often first hired into staff positions before joining the academic faculty. While sample sizes were small, differences were statistically significant. URM faculty reported that mentors encouraged their interest in an academic career and facilitated career advancement. The belief that mentoring is important to academic advancement is consistent with the 2003 study by Jackson et al., which concluded that having a mentor is critical to having a successful career in academic medicine. Jackson and colleagues also noted that junior faculty are responsible for finding a mentor and that faculty without a mentor rarely found other individuals (such as a department chairperson or colleague) to take on the responsibilities of a mentor.

In the present study, both URM and non-URM faculty perceived medicine as a difficult environment. This is consistent with the findings of Schindler and colleagues, who described "high levels of depression, anxiety and job dissatisfaction, especially in younger faculty," and recommended supporting and encouraging junior faculty participation in mentoring and faculty development programs. URM faculty who had completed a faculty development program were not only able to identify difficult experiences that were unique to URM faculty:

... Stereotypes and a lack of belief that I am capable ... [I am] generally accepted into the academic community but there is skepticism about my competence.

Table 2. Knowledge and experience of career development and perceived faculty standing reported by URM and non-URM faculty, UCSD 2005

	URM (n=18) n (%)	Non-URM (n=12) n (%)	P Value ¹
Experience as a Student			
Role model prompted interest in academic medicine	8 (44)	1 (8)	0.04
Participated in development program(s) as a student	5 (28)	1 (8)	0.19
Knowledge and Experience as a Faculty			
Aware of any faculty development programs	16 (89)	9 (75)	0.32
Found out about faculty development programs			
through personal contact	17 (94)	5 (42)	0.001
Multiple contacts about faculty development programs	s 14 (78)	4 (33)	0.02
Participated in faculty development program(s)	14 (78)	2 (17)	< 0.001
Perceived Faculty Standing			
Fits in well in department	9 (50)	10 (83)	0.06
Goals and expectations match UCSD	14 (78)	11 (92)	0.32
¹ P value for z statistic (based on 2-tailed probability)			

They were also able to acknowledge the difficult experiences that they shared with their non-URM colleagues and were able to reflect on the strategies that can be employed to improve the likelihood of success in the academic environment:

...[You must] find a niche, find a passion, learn how to choose your battles, connect with people of like mind so you don't feel isolated. I learned that even the most well funded, most accomplished feel alone.

Although URM faculty were significantly more likely than non-URM faculty to have found out about development programs through personal contact with mentors, peers and program directors, and were also significantly more likely than non-URM faculty to have received multiple contacts about faculty development programs prior to enrollment in a program, once URM faculty completed the program, they were convinced that their experience enhanced their work performance. URM faculty interviewed described the importance and the personal impact of a faculty development program on their academic career:

You do not know what you need until things go wrong ... NCLAM identified deficiencies not known to me—they told me what I needed to get promoted and what people are looking for.

Most importantly, without my faculty development experiences, I probably would not have survived as an assistant professor.

This perception of the importance of faculty development programs is reinforced by the findings that a increased rate of retention of URM faculty in the SOM and in academic medicine is associated with participation in a faculty development program.⁶

At UCSD SOM, the office of the vice chancellor for health sciences supports the participation of all junior faculty in NCLAM, a professional development program that addresses some of the findings in this study. NCLAM matches each junior faculty participant with a senior faculty member. The NCLAM approach includes instrumental mentoring, which relies on senior colleagues to collaborate with junior faculty on research or teaching projects, critique their scholarly work, nominate them for careerenhancing awards, include them in valuable networks and circles, and arrange for them to chair conference sessions or submit manuscripts. NCLAM also focuses on faculty development with an emphasis on introducing faculty to the institution's mission and culture.

The present study was conducted in a single institution in southern California. Results may not be applicable to all other institutions but highlight the value of institutional self-assessment when designing programs to enhance the recruitment and retention of URM faculty. Sample sizes were low, based on the number of URM faculty available to participate and the lower response rate from non-URM faculty. Many differences, however, were large and significantly different.

CONCLUSION

This study explored the career paths and attitudes of URM faculty at UCSD and compared them to a sample of non-URM faculty and suggests that as academic centers expand their search for URM faculty, they may find competitive candidates in existing staff positions and alternative faculty tracks within their institution. In addition, URM faculty should be informed often and personally about opportunities for faculty development. This may increase their participation in career development programs and improve faculty retention.

Although faculty believe that they are working in a difficult environment, URM faculty who completed a faculty development program expressed satisfaction with their career path. One URM faculty summarized this well:

Animo! No te desesperes! Take heart! Do not despair! It is a long and difficult road, at times daunting, but there are incredible rewards that can be found nowhere else in medical practice that outweigh the difficulties.

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