

# A Study of the Relational Aspects of the Culture of Academic Medicine

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## Abstract

### Purpose

The impact of medical school culture on medical students has been well studied, but little documentation exists regarding how medical faculty experience the culture in which they work. In an ongoing project, the National Initiative on Gender, Culture and Leadership in Medicine, the authors are investigating how the existing culture of academic medical institutions supports all faculty members' ability to function at their highest potential.

### Method

The authors conducted a qualitative study of faculty in five disparate U.S. medical schools. Faculty in different career stages and diverse specialties were

interviewed regarding their perceptions and experiences in academic medicine. Analysis was inductive and data driven.

### Results

Relational aspects of the culture emerged as a central theme for both genders across all career categories. Positive relationships were most evident with patients and learners. Negative relational attributes among faculty and leadership included disconnection, competitive individualism, undervaluing of humanistic qualities, deprecation, disrespect, and the erosion of trust.

### Conclusions

The data suggest that serious problems exist in the relational culture and that such

problems may affect medical faculty vitality, professionalism, and general productivity and are linked to retention. Efforts to create and support trusting relationships in medical schools might enhance all faculty members' efforts to optimally contribute to the clinical, education, and research missions of academic medicine. Future work will document the outcomes of a five-school collaboration to facilitate change in the culture to support the productivity of all medical faculty.

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**A** central task of medical schools is to help students, faculty, and medical practitioners learn how to form caring, healing relationships with patients and their communities and with each other. The educational environments, or the culture or milieu of work, reinforce learning, teaching, and the practicing agenda or belie the very intent behind our work.<sup>1</sup> Given the relevance of

relational issues to health care, we describe our findings regarding the relational aspects of the culture of academic medicine.

A rich literature on relationships between physicians and patients provides evidence of the importance of trusting relationships for enhancing patient care and clinical outcomes.<sup>2–5</sup> In medical education, effective relationship formation and trust is pivotal in facilitating learning<sup>6,7</sup> and is helpful for interdisciplinary clinical partnerships and multidisciplinary research collaboration. In hospitals, positive interpersonal relationships have been linked to enhanced nurse and physician performance.<sup>8,9</sup> More recently, relationship-centered health care has been linked to quality of care and organizational performance.<sup>10–12</sup> In a report to the Association of American Medical Colleges (AAMC), Inui<sup>13</sup> “acknowledges the importance of the many relationships between individuals and positions in academic medical centers that embody our culture and affect any strategic plan we might devise or implement. In our organizations many of these relationships are hierarchical in nature and must be in play for any systematic change to go forward. . . .

Other key relationships that may express and shape professional values and behaviors as well as medical organizational change include those among peers (clinical, research, education) and others.” Beyond medicine, relational trust is a hallmark of effective education in middle schools<sup>14</sup>; in management and sociology studies, positive workplace relationships have been shown to benefit careers,<sup>15</sup> and in business schools, relationships between faculty have been shown to impact professional life beyond career benefits.<sup>16</sup>

Respected analysts have expressed concern about a conflict between traditional professional values and the commercialism of medicine.<sup>17–21</sup> Others have concluded that the development and funding of new knowledge in the biomedical and clinical sciences, and pressure to increase clinical “productivity,” are given priority, with less attention devoted to social activism, humanistic concerns, or faculty development, and with educational excellence a less prestigious individual accomplishment.<sup>22–24</sup> To our knowledge, there has been little study of how current challenges in academic health centers

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(AHCs) affect the experience and relationships of medical faculty.

Although the focus of our overall research project has been on culture change to support the advancement of women and underrepresented minority (URM) faculty in academic medicine, this report is restricted to a central emergent theme, the relational aspects of the culture of AHCs, as reflected in our interviews with faculty. Little work has addressed cultural changes that would create environments more appropriate for taking full advantage of women and URM faculty's potential contributions, although one report did suggest that cultural and organizational issues in academic medicine contribute to women's lack of advancement<sup>25</sup>; outside medicine, a body of literature describes organizational issues for women in the workplace.<sup>26,27</sup>

The purposes of this article are therefore (1) to present insights into relational aspects of the culture of academic medicine at select institutions from the perspective of medical faculty, and (2) to consider the implications of these insights for all faculty, with special attention to women and URM faculty. Our findings are part of a larger set of qualitative data associated with the National Initiative on Gender, Culture and Leadership in Medicine (informally known as C - Change, which is short for Culture-Change).<sup>28</sup> This initiative, made possible by the Josiah Macy, Jr. Foundation, comprises a partnership of five medical schools and Brandeis University, collectively engaged in action research to address the imperative of developing women and URM faculty members' full potential and leadership in academic medicine in the United States.

## Method

We selected the five C - Change medical schools to represent the diverse organizational characteristics of the 126 medical schools in the U.S. at the time of our study (i.e., public/private, National Institutes of Health [NIH] research intensive, primary care/community orientation). Schools were selected from each of the AAMC-designated regions. One school each was selected from the Western, Southern, and Central regions and two from the Northeastern region, which has the largest concentration of

Table 1

**Gender and Career Stage (n = 96) of Faculty From a Five-Medical-School Study of the Experiences of Faculty (2006–2007)**

Career stage (total =96)	Female faculty	Male faculty
Early (20)	13%	7%
Plateau (23)	15%	9%
Leadership (29)	16%	14%
Left academic medicine (24)	11%	14%

medical schools. Included were two public and three private schools. Aggregate statistics regarding women and URM faculty in these schools were almost identical to national statistics. At the time of this study (2006–2007), nationally, 32% of medical faculty were women, and, in participating schools, 35% were women. Nationally, women made up 16% of full professors, and, in participating schools, 17% were women. Nationally, 7% of faculty were from URM groups (3% African American/black and 4% Hispanic), and, in participating schools, 6% were from URM groups (2% African American/Black and 4% Hispanic).

## Participant criteria

We selected medical faculty from the five C - Change medical schools using stratified purposeful and chain sampling strategies<sup>29</sup> according to medical school site, gender, race/ethnicity, department/discipline, and career status. We used stratified purposeful sampling to capture variations of experience or perspective that may occur among individuals at different career stages. The PI (L.P.) sent an e-mail invitation to participate to potential interviewees together with information about the purpose of the study. We did not offer any compensation. Prior to interviews, we secured written informed consent. Interviewers reiterated the purpose of the study and ensured confidentiality and anonymity at the beginning of each interview. IRB approval was obtained.

Participants were research scientists, medical and surgical subspecialists, and generalist medical faculty who held doctoral degrees (84% MD/DO, 16% PhD) and represented a wide diversity of subspecialties. We invited 170 faculty members in four career stages to participate: (1) early career, that is, those who had been faculty members for two to five years, (2) "plateaued," that is, those

who had not advanced as expected in rank and responsibility and who had been faculty members for 10 or more years, (3) faculty in leadership roles such as deans, departmental chairs, and center directors (identified as "senior" in the quotations below), and (4) former faculty who had left academic medicine ("departed"). We divided interviewees equally among the four groups, but with fewer participants in the early-career stage because we reached data saturation in this category early in the study (Table 1). We interviewed similar numbers of faculty from each of the five schools.

## Data collection and analysis

The four coauthors conducted the one-on-one interviews. We audio-recorded and transcribed verbatim all interviews, which were typically one hour in length. The semistructured interview guide consisted of open-ended questions focused on choice of medicine as a career, aspirations of faculty, energizing aspects of their careers, barriers to advancement, interdisciplinary collaboration, leadership, power, values alignment, and work–family integration. We developed the guide through a pilot series of interviews. List 1 shows some of the questions.

## List 1

### Selected Questions From the Interview Guide

- What is it about your work that energizes you?
- When have you felt most successful in your work?
- What has been your sense of being a part of your department/university/institution?
- What has been difficult or frustrating in your work?
- How are your aspirations for yourself in academic medicine being fulfilled?

We analyzed aggregated data by repeatedly reading masked interview transcripts to develop understanding and interpret meaning. After identifying and applying codes to the more than 4,000 pages of transcribed narrative data, we stored coded data using Atlas.ti software. Our analysis involved data reduction or condensation, from which we identified patterns and themes emergent in the coded data. We used an inductive and data-driven analysis process, in line with grounded theory.<sup>30,31</sup> To verify our conclusions, we returned to the transcripts, reevaluating the findings by review among the four coauthors to develop intersubjective consensus.

## Results

### Sample selection

Of the 170 faculty who were invited to participate, 8 individuals refused (usually because of time constraints), 54 did not respond, and we were unable to schedule with 12 potential interviewees. A total of 96 faculty participated, for an acceptance rate of 56%. Fifteen percent (16) of interviews were in person, and the remainder (80) were by telephone. It was more difficult to identify male “plateau” faculty than similar-stage women faculty members. Overall, those in leadership were more likely to agree to participate, and we found it most difficult to secure interviews with early-career faculty (Table 1). Women (55%) and URM faculty were oversampled (17% African American/black, 4% Hispanic/Latino, and 79% Caucasian/white), as were generalists (20%) (defined as general internal medicine, family medicine, and general pediatrics).

### Relational aspects of the culture

Relational aspects of the culture emerged as a central theme in the data, with no appreciable gender differences noted. Quotes in different categories are from different respondents. Relational comments tended to be spontaneously mentioned rather than elicited by interviewers, except in responses to the question about institutional support of interdisciplinary collaboration. Relatively few women and men described positive relational attributes with colleagues. Where positive relationships with their colleagues were described, there was often a sense that these relationships assumed important protective or

buffering effects against the dysfunctional aspects in the culture. A senior woman said,

I wouldn't say it's an overly socially warm place but I guess it is welcoming. People are nice here, it's easy to interact. It is a place that's relatively free of bias, at least racial bias. Women haven't done any better here than they have in other academic places but it's still a nice environment and I've been able to do all the things I've wanted.

She went on to say later in the interview,

You have to position yourself so that you are part of the decision making. You can't expect and wait to be the beneficiary of benevolence . . . the recipient, and so I guess that's been my guiding principle; this is a marketplace environment. Even though we like to think we live the life of the mind, it in fact is a marketplace and you have to have something to be able to bring to the table that gives you equality.

A woman early in her career said,

We have a small group of junior faculty who by all of the turmoil—we have been thrown together into each other's laps and that has been a wonderful thing because we can say “Oh my gosh, this project or line of thinking isn't working out. There's basically something wrong there and I can't figure out what it is.” If I were to say that to a senior colleague, I would put at risk their evaluation of me because I had made such a grave mistake. So identifying those colleagues can help you sort out the problems you have at work.

When this individual was asked how her aspirations in medicine were being fulfilled, she replied,

I guess with establishing relationships in the workplace of trust, relationships in which I can howl my failures without fear of retribution in some way, so that part is terrific. I mean, to work in an environment doing something that you like to do and having colleagues around you who are for the most part supportive or a number of them, that's very rewarding. I still don't know if I'm going to succeed . . . so that's a scary or uncomfortable position.

Other faculty also commented on how any closeness with a colleague would provide some counterbalance to the negative aspects of the culture. A senior man said,

I feel [a sense of connectedness] when I'm working or talking doctor to doctor and we're discussing a mutual patient. That's where there's a real sense of family on the

individual level. And the flipside of that is the administrative side which forces all of the life out of everything you do.

Respondents particularly valued their research collaborators. A senior female scientist who had left academic medicine said, “I felt very little of a sense of belonging except to my own research group, which felt like a team with a wonderful mix of people.”

### Positive relationships with learners and patients

Numerous faculty spoke of positive and valued relationships with students and residents, and with patients. Male and female faculty found particularly rewarding their interactions with physicians-in-training, as illustrated below:

I'm most successful in my work when I'm actually at the bedside. Yeah. When I'm at the bedside with a learner. I feel like I'm giving out. I'm giving in a way that you can only give if you're with the patient. You're with a learner. That's when I'm most gratified. (Senior male in obstetrics)

And so to see the residents get excited about something that I'm excited about, and that's good for the community and good for people who really don't have access to care. I think right now that's what really gets me, so it is teaching. But it's teaching, not so much the kind of didactic or the typical ward attending kind of teaching, it's sort of the broader teaching about the world of medicine in community. (Plateaued female generalist)

The sense of belonging I had was really at its highest when I was with learners. I never really felt a particular kinship to other faculty. I think it was really pretty much at times when I was really immersed and surrounded by students that I felt like I was a member of the university. (Senior woman in pathology)

Faculty also referred to their relationships with patients when we asked about what energized them in their work. For example:

I really do like the oneness of working with patients and getting to know them; establishing rapport and hopefully getting them to open up to . . . establishing the trust and all. (Senior man)

I take care of frail elders. That really energizes me in a way that I can't explain. I love these people. Even after I leave a day here, I can go to the nursing home even though I'm tired, and it will reenergize me. (Midcareer woman)

### Collaboration

Some respondents described collaboration with a few colleagues where it was seen as a

very positive activity that enhances the environment, research, and education:

Part of it is a network of colleagues—I mentioned locally, but also nationally. So I have a couple of folks whose values I share and we get together sporadically to trade stories. They tend to be in leadership roles in other institutions and we support each other in trying to affect these big complex institutions and train a group of people to carry on the work. (Male senior generalist)

I really try to make a collaborative environment where everybody feels that they're part of the decision making and part of effective change . . . it's a much better environment if there's collaboration and support. (Woman leader)

It's great when it happens, but when it happens, it's because you're sitting with somebody at lunch . . . It's because you're sitting there and talking about your work and you think, "Oh, I work on that. Let's do something together." I've gotten a grant by doing that. . . ." You go to meetings; you go to each other's seminars. That's how it happens. And so several of us collaborate on that, but it's not because anybody told us to. It's because we found each other. So that does work. Collaboration is the best thing. (Senior female scientist)

### Dilemmas in relationships

**Disconnection.** In contrast, many faculty members described feeling isolated and lacked supportive relationships. Narratives documented personal disconnection and separation rather than relationship formation among colleagues. Respondents perceived that the environmental norms and structures did not value or support relationships and did not facilitate their formation. The troubling relational themes that emerged in the data were evident for both men and women and were expressed by faculty in all career stages.

A male subspecialist early in his career commented,

I couldn't pick out anybody that I corresponded with by e-mail or letters out of a line-up. I knew very few people in different divisions. It was very much an isolated situation. Go to your clinic, do your thing, go back to your office, go to the medical suite, do your procedures, go back to the office. . . .

Comments from two faculty (midcareer and departed) illustrate their awareness of barriers to relationship formation:

I realized that I valued relationships and interpersonal behavior that the institution did not. (Female)

So a lot of what women do to make a culture more nurturing—help the people to grow as human beings, to become, in my judgment, better clinicians—is not something the institution values. They can do it if they want, they get all kinds of laudatory praise, but they do it on their own time. (Female)

We heard these themes from many faculty in early or midcareer stages, but those in leadership also commented on their disconnection with colleagues. A number of faculty commented that leaders felt distant from them.

**Competitive individualism.** Interviewees described an intensely individualistic and competitive environment where rewards are usually accorded to individual contributions. Respondents perceived that individuals and institutions tend to function on behalf of their own self-interests. It was accepted that a stressful, competitive environment is necessary to promote scientific progress and achievement. A senior male faculty said,

You're encouraged to be a reductionist in your thinking, to get your niche to get to be successful, which again I don't have a problem with that in general. You are encouraged to be single minded, self-indulgent, selfish; the first question out of people's mouths is, "Well what is this going to do for me?" "What paper do I get out of it, where do I go on the paper, who's looking out for me?" and all that stuff. And it's just like there should be enough to go around.

He went on to comment,

But I think what it breeds—and this gets into the heart of the academic culture certainly at its lower and midlevels—is an unpleasant place in a lot of ways, as people are scrambling up over one another trying to find their way and find their niche and find their grants and so forth. . . . I don't like what it does to people. And I think very nice, thoughtful people become very selfish and self-indulgent because they're pushed to get the grant.

A number of faculty found individual self-promotion distasteful. A woman noted,

She [her supervisor] said "you have to brag, you really do." And that's very difficult for many people because it's not the nature of some of our cultures,

experience, and maybe just family culture, too.

A senior man who left academic medicine said,

I wasn't driven by the self-promotion that I think has to come on in academic institutions. It's all about getting new grants—"I have more than you" and "I'm the expert in this." So it's a little bit of an unreal, self-promoting kind of environment.

The expectation of personal overextension was often expressed and may be another result of the competitive environment. The culture described by respondents was often linked to having other adverse effects on faculty. The competitiveness of climbing the ladder in academic medicine was related to faculty members assuming aggressive, self-seeking, and uncollegial behaviors not previously evident. A number of faculty suggested that dealing with this environment brought about changes in outlooks and behaviors, both in colleagues and themselves. A senior woman who left academic medicine noted,

And there were colleagues of mine to whom power meant a great deal and I watched them become people I didn't like as they dealt with this hostility and grabbed for the power, and they achieved a great deal and I don't take it away from them, but in the course of it, they lost their humanity. They became people I could no longer respect. They became dishonest and manipulative.

Another senior woman who stayed in academic medicine pointed to the creation of a "toxic" environment:

I never felt like I belonged. . . . The environment that I was in was quite toxic in an interpersonal way. . . . You learn to become extremely aggressive and obnoxious people.

### Undervaluing humanistic qualities.

Numerous faculty spoke of not being recognized as people beyond their professional roles at work. There was a lack of attention to what individual faculty were themselves feeling, with no invitation or expectation to express personal emotions or to talk about important personal issues either related to work or to their personal lives. Faculty described the environment as having a "dehumanizing" effect on them by only recognizing the work aspect of faculty. The culture seemed to reduce the

qualities in faculty that make them able to meet human needs, be compassionate, and show sensitivity to others. A midcareer female medical subspecialist said,

Nobody cares what makes me tick here. I'm completely invisible—as a human—as a person. A nonprofessional person. It just seems like I go through most of my day with nobody recognizing who I think I am. Or acknowledges me in any—in any complex sense . . . or me as a unique individual. I just appear to be what I represent.

Another female faculty member commented,

Check your humanity at the door, that was how it felt. Any sign of . . . this is gonna sound harsh, but . . . any tendency towards kindness was viewed as weakness.

Several interviewees felt that this situation had the effect of preventing them from being fully themselves in their work life and that they only selectively brought aspects of themselves and their thinking to their professional lives:

One consequence of this is a dehumanizing effect on the faculty, where an individual is not able to bring his or her feelings authentically into the workplace. (Senior woman physician)

**Deprecation and disrespect.** Interviewees gave little indication of medical schools cultivating an appreciative culture, but rather one of finding fault. Researchers, educators, and clinicians spoke of feeling disrespected or of not being valued as faculty who have contributed to the medical school's successes. A female medical subspecialist commented on the common expectation of finding fault:

People tend to defend their territory, defend and assume that you're attacking them. This is an environment where the assumption is that people are trying to think ill of you. Or are trying to find the moment where you slip up. Who wants to work in that kind of environment?

A male medical subspecialist told of an experience:

I have a relatively new [supervisor]; after he'd been here a year, he called me into the office and said that he had reviewed everything that the department had ever done, all our publications and in his mind—this is a quote—"We'd never done anything important in the history of the department." [laughs] I sat there and said, "Really?" I said "Then could you perhaps clarify to me what counts as

important?" He said, "Yes, publishing in [two elite medical and science journals]." I said that "within my department of 100 faculty, I doubt there is anybody who even reads those journals, much less publishes in them."

Another dimension of disrespect emerged as disloyalty, as faculty also perceived that their larger organizations are not loyal to the faculty. A senior female basic science faculty member commented,

I think what they've done recently, not to me as much, but to faculty who have always had grants and who are now having trouble getting them. . . . And now they're turning around and if people can't get grants, they're making them feel bad, making them feel kind of worthless. I think that's not nice. And instead of saying, "Good job, you've done a good job. You've gotten grants for 20 years and you've been a good teacher or you've been a decent teacher." And now [they say instead], "You don't have a grant; now you're worthless."

Numerous faculty members commented on not feeling recognized by the medical school for their contributions, as this example from an early-career woman physician illustrates:

We're not rewarded by the medical school at all. We're not recognized. A few people each year might be recognized, but for the ongoing day-to-day grind, we're not recognized by the medical school for our efforts.

A midlevel male clinical faculty member articulated a common theme where respect was associated with receiving grants and disrespect with teaching activities:

I've seen it everywhere I've ever been, so it's not unique to this university. What the university had was this hierarchy of needs that began with your ability to support yourself with grants, [and] with teaching at the bottom, and it was very explicit. Personal relationships were defined by distrust and disdain if you didn't get a grant.

A senior woman remembered how she adapted, but at a cost:

My assumption would be that a lot of their behavior was from a place of insecurity in which they learned some really powerfully negative pushback behavior that I learned too.

**Erosion of trust.** In the interviews, we found instances where faculty were unwilling to say what they believed for

fear of retaliation. Likewise, faculty feared being penalized for discussing home problems. A female plateaued faculty member explained her sense of not being able to express herself for fear of losing her job:

Well, I think the hardest thing for me was to be in a department where you couldn't express yourself [your opinion] without feeling that you were jeopardizing your career. The hardest thing was that I wasn't honest to myself sometimes and because I was afraid earlier on that I would lose my job—I would get kicked out of the department. Although I don't know if that would have happened, but it did happen to other people. There were people in our department who lost their jobs over their being expressive. Their lives were made absolutely miserable.

A midcareer female faculty member described how she overextended herself because of her fear that if she was not seen to be doing this, she would risk losing her job:

Early on, when I was doing purely clinical, in my division, I was bringing in more money than anyone and part of it is because I would be working until 10:00 at night and just thinking, "These people may fire me. I've got to do all this work. You know, I can't ever refuse anything." So I was really, really, really killing myself and, of course, getting older in age and feeling more and more tired.

Respondents revealed breaches of academic integrity that seemed to be tolerated or even expected in the environment. Some examples follow from women:

I work on projects, where if I present any kind of tantalizing evidence someone down the hall will go and do those experiments and just scoop you and just essentially take all your ideas and everything and just run with it and because they're bigger and they're faster. It's also stealing of ideas. You know, you send a grant to have a colleague look it over and lo and behold, your data end up in their grant and things like that.

What he had a wonderful ability to do is to take all of my hard work and give himself credit for it.

My chairman asked me to take over the new faculty, and so he would give me these things that I was supposed to tell them we were going to do for them. And I would say to him, "We don't do this for people. How can I tell people this is available when you and I both know we don't follow through on that?" He said "Well, you have to because that's the only

way they'll come here." Well, I don't lie. That's not what I do.

The following quotations are from male leaders:

I basically value being completely honest. You know, I'm asking for this, and this is why I'm asking for it, and this is what I'd like to do with it. Honesty is not always either rewarded or reciprocated in academic medicine.

I think there are plenty of people that will try to maneuver or get things done or get decisions on their behalf by not being fully forthright or honest about what the issues are. I have this with students as well as faculty and administrators. So you have to be very careful in the academic environment to ask the right questions and look for the right motivations, or the wrong motivations, as they are in some cases.

The theme of dishonesty emerged in the educational enterprise, too. A female midcareer faculty member said,

We would tell students they were going to get excellent teaching, but they kept increasing the number of patients that the doctors had to see, and I watched the education of the students falling off everyone's radar. I said, "You know, we're lying to the people who are doing our evaluations, we're putting things on paper that we don't do, and we're not being fair to the students." It was like, "We have to make money so the students are going to have to suck it up." And you know, what happened was that the people who were the best teachers ended up leaving over and over again.

## Discussion

As illustrated at the beginning of the Results section, we did hear very positive comments about teaching, where effective relationships with students were evident and prized, and relationships with patients emphasized trust and caring. Some faculty also spoke of supportive collaborative relationships with close colleagues. However, negative perceptions of relational experiences were articulated in the majority of all interviews, despite the fact that the questions posed were open-ended and purposefully sought accounts of positive experiences in the tradition of Appreciative Inquiry<sup>32</sup> and did not request accounts of negative relational issues. Even in this context, fundamental aspects discussed by faculty of the experience of academic medical culture were a sense of disconnection and an

erosion of trusting relationships with colleagues and supervisors.

Our data suggest that serious problems exist in the relational culture and that these can affect faculty vitality, professionalism, and productivity and are linked to retention. These aspects of the culture may undermine the goals of medical institutions and are antithetical to fostering superior patient care, biomedical research, and educational excellence. At the very least, they make medical schools much less supportive and positive workplaces for professional work.

This study was conducted in only five schools; the ability to generalize insights from our qualitative findings is being assessed by us through a national quantitative survey of medical faculty. However, the themes we report were generally consistent across the faculty we interviewed. In earlier pilot studies when the PI interviewed a national sample of 22 faculty, she found similar results (unpublished).

### Alignment with the findings of other researchers

Our findings align with those of others; a recent survey study of four U.S. medical schools found elevated rates of depression and job dissatisfaction, especially among younger faculty.<sup>33</sup> These authors note, "Current medical students are being taught by faculty who are increasingly stressed and dispirited. . . . The majority of faculty respondents indicated that their initial job expectations were not being realized, they were not the contributors they used to be, and that their productivity was decreasing. Significant numbers of the faculty felt unsupported."<sup>33</sup> Additional evidence pointing to dysfunction in the culture are high levels of physician dissatisfaction<sup>34</sup> and faculty burnout in 37% to 47% of academic faculty,<sup>35</sup> although burnout was found to be uncommon in deans.<sup>36</sup>

Women physicians have 1.6 times the risk of burnout compared with male colleagues,<sup>37</sup> and the suicide rate in women physicians is twice that of other working women.<sup>38</sup> Women may be more sensitive reactors to the milieu of AHCs, and, together with URM faculty, they may be on the leading edge of a reaction to the perceived challenges of the

environment of academic medicine (the "canary in the coal mine").

### Relationships in health care

A lack of positive relational attributes may also be found in nonmedical workplaces, but we and others believe that such a lack has particular significance for medical settings because physicians must be skilled in forming trusting relationships with their patients to effectively address the biological, psychological, and social impact of illness.<sup>39</sup> Substantial evidence links relational deficiency with adverse health care outcomes. Physicians who are self-aware of their own responses and feelings when they are with patients are more effective and more satisfied in providing patient care,<sup>40</sup> and physicians' humanism correlates with patient satisfaction and adherence to medical advice.<sup>41</sup> Beach et al<sup>10</sup> recognized the quality of relationships as central to health care and articulated core principles: relationships in health care ought to include the personhood of the participants, affect and emotion are important components of relationships, and all health care relationships occur in the context of reciprocal influence. Safran et al<sup>11</sup> extend these concepts and propose a model of relationship-centered organizations. It has been shown that chronic disconnection results in diminished energy and creativity and precludes growth-fostering relationships.<sup>42-44</sup> Our data also suggest that negative relational attributes are barriers to faculty vitality, creativity, and satisfaction. Disconnection and emotional detachment in the culture can be viewed as a parallel to ineffective communication between doctor and patient, as well as influencing organizational performance.<sup>11</sup> Continuity of relationship is emerging in new trends in medical education such as the Cambridge Hospital initiative<sup>45</sup> and a current Carnegie Foundation study.<sup>46</sup>

### Linkage to professionalism

Cohen and colleagues,<sup>23</sup> reflecting on a new guide to medical professionalism,<sup>47</sup> noted recently that "institutional and organizational settings of contemporary medical practice pose significant impediments to achieving several of the responsibilities to be assumed by physicians." They suggest that these structural barriers to professionalism may be beyond the control of physicians.

Although we agree with their social structural analysis, we also ask whether there are additional barriers to professionalism in the culture and relationships within academic medicine.

In the past year, new accreditation standards mandate “interpersonal and communication skills and professionalism” for residency training.<sup>48</sup> Moreover, “medical schools (including faculty) must ensure that the learning environment for medical students promotes the development of explicit and appropriate professional attributes in their medical students.”<sup>49</sup> These standards reinforce the American Board of Internal Medicine Project Professionalism<sup>50</sup> and the AAMC’s Medical School Objectives Project,<sup>51</sup> and they direct attention to effective relationship formation among medical faculty.

### Latent culture

Medical students tend to lose their humanistic and altruistic attitudes during their medical school years.<sup>52–60</sup> Current practices may, in fact, be barriers to physicians-in-training developing compassion and competence, and they may contribute to unprofessional behaviors.<sup>61,62</sup> A substantial literature describes the informal or “hidden curriculum” for medical students where students experience behaviors and attitudes, embodied in the organizational approach, that contrast with the school’s espoused mission.<sup>63</sup> In effect, students undergo tacit social conditioning<sup>58,64,65</sup> and learn certain informal norms and values that may be at odds with humanistic and ethical comportment. Many attributes of the culture in medical schools<sup>66</sup> have been thought to be barriers to learning, team building, and compassionate care.

Just as the “hidden curriculum” has been linked to unwarranted stress for students, as well as to lapses in their professional and ethical behaviors,<sup>59,67–69</sup> we postulate that faculty who experience the latent culture described in our findings may exhibit similar feelings and behaviors. Furthermore, medical faculty are teachers to be observed and emulated by medical students, and, in this latent culture, they may pass on the norms and culture they experience for themselves. Part of the responsibility of medical schools is to teach medical students to be humanistic, socially responsible, and compassionate<sup>70</sup>

and to provide learning experiences that nurture trainees’ self-awareness and emotional development. Lack of modeling of effective relational practices by faculty would logically impact student learning as well as patient care.<sup>71</sup>

A structure that rewards individual achievement, self-promotion, and being lead author on publications, rather than collaborative efforts, may seriously impede interdisciplinary and collaborative work in the biomedical sciences. The NIH have recently recommended interdisciplinary collaboration between scientists as a priority for scientific discovery and translation of new knowledge to clinical outcomes.<sup>72</sup> For example, teams of researchers that include practicing physicians as well as laboratory scientists are more likely to produce advances in scientific knowledge that can be translated and applied to improved patient care. High levels of ethical misconduct reported in federally funded faculty researchers<sup>73</sup> may also be partially attributed to the culture in which faculty may find themselves working.

### Why faculty stay in academic medicine

Similarly to students in *Boys in White*<sup>74</sup> who turned their medical school experience into something functional as they learned the practice of medicine, our faculty may draw on more positive aspects of their experience in AHCs to buffer them from dysfunctions in the system. The qualities and rewards felt from their relationships with students and patients, the excitement of the intellectual challenge of medicine, an altruistic social contract, and the few close relationships that they do have with colleagues buffer, protect, and support faculty in their contributions to health care, education, and research, and decrease the likelihood of members of this critical group leaving academic medicine. Our data suggest that behaviors promoting relationship formation can mitigate stress and may help prevent burnout. Our experience of working with medical faculty strongly suggests that most faculty wish to have trusted colleagues and that most desire connection and relationship formation.<sup>64,65,75–78</sup>

Collaboration involves forming relationships, developing understanding of the perspectives of others, and learning

effective patterns of interpersonal communication. To be successful in the long term, arriving at some enjoyment of working with other team members is helpful. Essential are the cognitive contributions and expertise of team members, but their emotions affect not only their own work but the work of the group. So, in any workplace, supporting both the emotional and intellectual well-being of workers will be vital for optimal work.

### Recommendations

“*The Human Condition of Healthcare Professionals* aptly expresses the everyday essence and deeper meaning of medical work and the impact on the men and women who have chosen it.”<sup>39</sup> A logical response to the findings of our study would be for medical schools to make efforts to instigate and support practices that encourage relationship formation among faculty and leaders. Supporting connection in trusting relationships and the human condition of health professionals would facilitate a core change in the medical school culture and contribute to realizing the potential of all faculty, including women and members of URM groups. We suggest that enhancing relational practices in medical schools would result in improved communication and collaborative efforts in patient care, research, education, and administration, and a more satisfied and energized faculty. This would allow the institution to avail itself of both women’s and men’s potential contributions and skills. Similarly, in his recent AAMC presidential address, Kirch suggested that low faculty personal morale is caused by an imbalance within our institutions and recommended that “we spend time explicitly assessing and building the right kind of culture.”<sup>79</sup>

The eventual improvements achieved by the C - Change Initiative should benefit all faculty in academic medicine and enhance the value of the nation’s substantial investment in health care delivery and workforce development. In addressing what are national problems in medical schools, the deans of the five C - Change schools have taken a leadership stance and courageous approach to having their faculty confidentially interviewed. Additionally, the deans are committed to being personally engaged in a collaborative Learning Action Network to explore methods for making

changes in the cultures of the C - Change schools. Efforts and outcomes of the C - Change Initiative will be disseminated as the larger project more finely hones the issues. Efforts to create and support trusting relationships in medical schools are likely to enhance all faculty members' efforts to optimally contribute to the clinical, education, and research missions of academic medicine.

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