## Achieving women's equity in academic medicine: challenging the standards

Despite extensive work for decades to improve gender equity in academic medicine, women continue to lag behind men in the number of tenure and leadership positions. This status quo hampers access of women faculty to the power and decision-making authority necessary to effect change.
By the 1990s, women accounted for $40 \%$ of US medical school enrolment. However, these enrolment increases did not address inequities in the recruitment and advancement of women into faculty ranks. As this Lancet theme issue attests, these inequities are well documented, and progress has been inadequate. In 2004, Columbia University Irving Medical Center (CUIMC) commissioned a taskforce to identify and study issues that women faculty face in its medical college, the Columbia University Vagelos College of Physicians and Surgeons (P\&S), and to make recommendations to
the Dean of the Faculties of Medicine and Health Sciences to improve equity. This taskforce identified a need for transparency and prioritised monitoring progress of women faculty through the ranks. Several task force suggestions were implemented, including work-life and parental leave policies, provisions to stop the promotion clock and to improve and increase childcare resources, and onsite lactation rooms. Faculty career tracks were also modified to allow greater flexibility between research, teaching, and clinical care. A range of faculty professional development offerings was implemented, with targeted interventions at crucial career points.
The Columbia University Senate Commission on the Status of Women (a permanent commission of the Columbia University Senate Executive Committee) was charged with inquiring into the status, equity, and opportunities available to women at all levels at Columbia University. The Commission sought the assistance of the Office of the Vice Provost for Faculty Affairs, who provided aggregated data on the counts of faculty with full-time


Figure: Total faculty by tenure status
salaried appointments within P\&S. Data on gender and faculty appointment type were drawn from the centralised Human Resources database and reviewed line by line for accuracy. Additionally, the Commission collated data on leadership: department chairs, divisional chiefs, and centre directors (only centres recognised by the university trustees were included in these analyses). Once collated, these data were submitted to the Office of the Provost for review and confirmation of accuracy. The Commission analysed these annual cross-sectional data on faculty positions by gender for the period between 2007 and 2017, to examine the progress (detailed methodology and data analysis is provided in the appendix)
The findings are shown in the figure (full results are provided in the appendix). Women accounted for $46 \%$ of total $P \& S$ faculty in 2017, an increase from $40 \%$ in 2008. However, these strategies did not result in substantial increases in the number of women faculty in tenured or leadership positions, with women accounting for only $18 \%$ of tenured positions, a percentage essentially unchanged over the 10 -year period. The overall increase in women faculty over this 10-year period was isolated to the hiring of women to nontenure track positions. In fact, the percentage of men faculty who are tenured or in a tenure-track position remained stable at $28 \%$, whereas, unfortunately, the comparable percentage of women faculty who are tenured or in a tenure-track position decreased from $16 \%$ to $12 \%$. In summary, more than four in five women faculty do not have the job security of tenure or the institutional investment and support that comes with the tenure track.
Regarding CUIMC leadership, only three (11\%) of $27 \mathrm{P} \& S$ departments and only two (13\%) of 15 centres are led by women, which is less than the national average of $18 \%{ }^{1}$ Leadership equity was present in two

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departments: in paediatrics, with women in $47 \%$ of division chief roles, and in obstetrics and gynaecology, with women in $50 \%$ of division chief roles. By contrast, only $14 \%$ of division chiefs in the Department of Medicine, the largest department in CUIMC, are women. The national average for women divisional chiefs is $24 \%$ by institution. ${ }^{2}$ Weighed against the starting proportion of $40 \%$ female residents, it is clear that women are not achieving equity in leadership. Association of American Medical Colleges peer institution data suggest that the problem of women's under-representation is widespread and not limited to CUIMC. ${ }^{2}$ As a result of their status at CUIMC, the power of women faculty is less than that of their male counterparts, who continue to hold most leadership positions. This absence of women in leadership positions perpetuates inequity and is detrimental to trainees who continue to lack role models. Crucial interventions are required to increase the representation of women in leadership. Present interventions, aimed at individual professional development, are not sufficient to deliver the needed change. Faculty development programmes should actively engage and motivate leaders to ensure gender equity, and these initiatives should be further institutionalised and based on the evidence regarding what has and what has not worked towards this end.
A major factor contributing to these inequities is implicit bias, and managing its effects requires an institutional commitment to the development of specific strategies. It is essential to improve the professional development of women faculty and to implement institutional change that supports the environment for, and the advancement of, all historically underrepresented groups. All institutional leaders and search committees should complete implicit bias training to ensure a more inclusive leadership.

Transparent hiring processes should be adopted, institutionalising best practices in hiring for all leadership searches to proactively attract and hire diverse candidates. Furthermore, leadership term limits should be implemented to increase opportunities for others. Departmental progress should be measurable and transparent, with leadership held accountable in annual departmental and institutional reports. Transparency is fundamental to achieve equity for underrepresented groups. Recommendations to promote transparency include issuing an annual equity report card by department, publishable on their website, and requiring each department to list all committees and members, with terms of appointments. These, along with transparency in the selection process for positions of leadership, are strongly recommended to improve equity.
As evidenced by the broad range of efforts made in the past decade to increase the number of women trainees and faculty members, it is evident that CUIMC is committed to gender equity and diversity in academic medicine. However, regarding leadership, the institution has not yet reached its goal. Research has shown that diverse groups substantially outperform homogenous groups; CUIMC only stands to gain by diversifying its leadership. Furthermore, if the demographic composition of academic medicine does not keep pace with the demographic composition of the US population, we risk a reduced talent pool, which would hinder the long-term growth and progress of academic medicine. Achievement of equity for women and minorities in academic medicine requires a new wave of innovative interventions that challenge the current standard efforts, while also addressing implicit biases on a systemic level. To ensure that women achieve positions of leadership and ultimately shape policy will require institutions to take bold initiatives, with the intention of being the leaders in achieving equity for women.

We declare no competing interests.
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1 Association of American Medical Colleges. Department chairs by department, sex, and race/ethnicity. Dec 31, 2017. https://www.aamc.org/download/486590/ data/supplementaltablec.pdf (accessed Oct 12, 2018).
2 Association of American Medical Colleges. 2013 benchmarking-permanent division/ section chiefs and department chairs. 2012. https://www.aamc.org/download/411802/ data/2014_table9a.pdf (accessed Feb 1, 2018).

