OPINION

In the wake of COVID-19, academia needs new solutions to ensure gender equity

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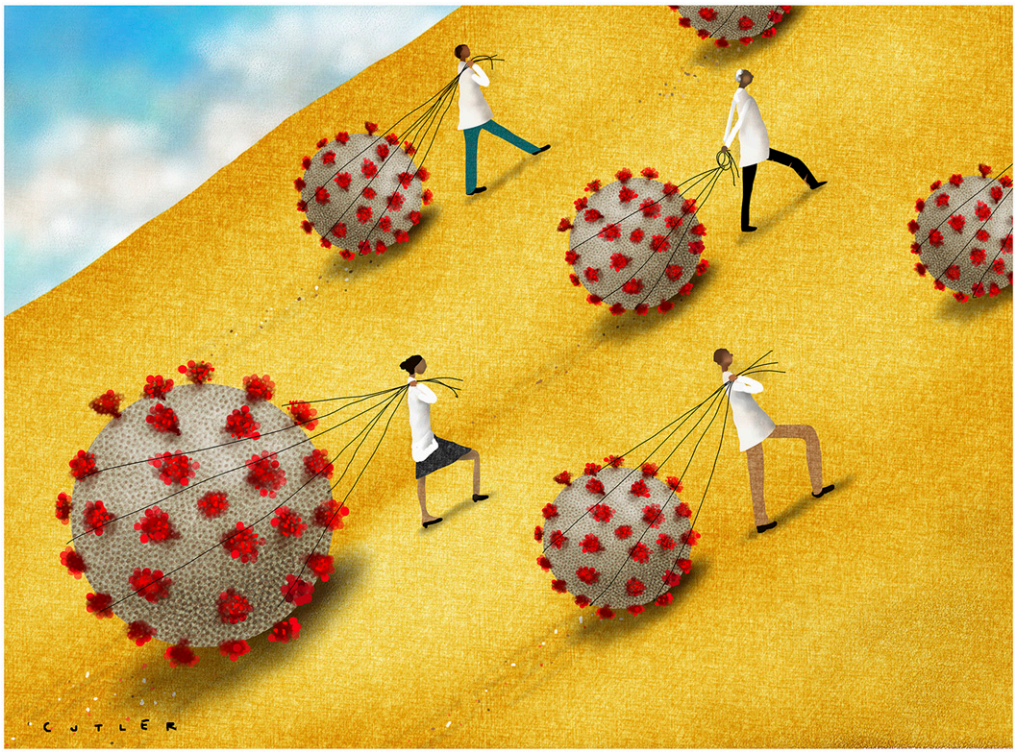
The coronavirus disease 2019 (COVID-19) pandemic has upended almost every facet of academia (1). Almost overnight the system faced a sudden transition to remote teaching and learning, changes in grading systems, and the loss of access to research resources. Additionally, shifts in household labor, childcare,



Many women academics will likely bear a greater burden during the coronavirus disease 2019 (COVID-19) pandemic. Academia needs to enact solutions to retain and promote women faculty who already face disparities regarding merit, tenure, and promotion. Image credit: Dave Cutler (artist).

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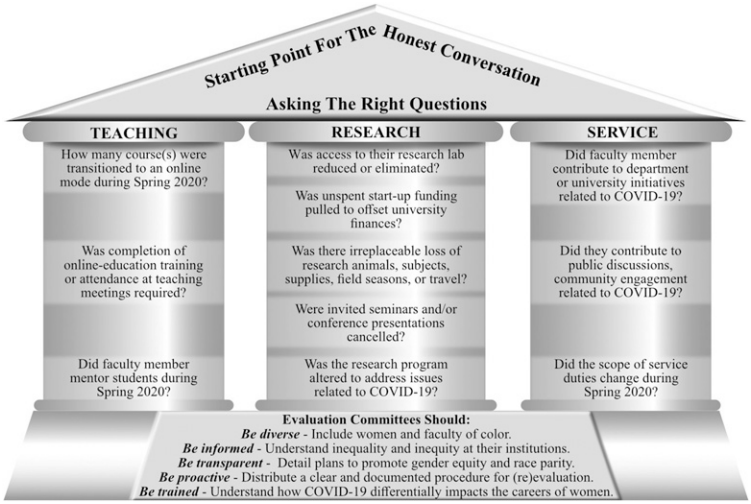

Fig. 1. COVID-19 has exacerbated existing gender inequities. An honest conversation within academia can help mitigate bias. Image credit: Roel Fleuren (http://www.sciencetransmitter.com).

eldercare, and physical confinement have increased students' and faculty's mental health needs and reduced the time available to perform academic work. A pandemic naturally highlights privileges, such as financial security and access to mental health care. It also amplifies the mental, physical, social, and economic impacts attributable to preexisting inequities in academia. Making matters worse, in times of stress, such as pandemics, biased decision-making processes are favored (2), which threaten to deprioritize equity initiatives.

All this means that even among those with privileged positions, including many academics, women will likely bear a greater burden of this pandemic. The burden will be even heavier for women who face intersecting systems of oppression, such as ethnicity, race, sexual orientation, gender, age, economic class, dependent status, and/or ability. Thus, academia will need to enact solutions to retain and promote women faculty who already face disparities regarding merit, tenure, and promotion (3).

Here, we examine ways in which COVID-19 is amplifying known barriers to women's career advancement. We propose actionable solutions, which include the formation of a Pandemic Response Faculty Fellow or Pandemic Faculty Merit Committee (PFMC), new/revised tenure and promotion metrics created by the aforementioned committee, and a framework to ensure that the new metrics and policies are adopted college-wide. We also caution against the popular tenure clock quick fix that poses a potential threat to a diverse future for academia.

Inequity and Economic Disparity

Equity is successfully enacted when all groups are given the needed number and types of resources so that they achieve equal results in comparison with other groups. Equality, in contrast, is a "one size fits all" approach that promotes equal distribution of resources. In academia, women faculty face both inequality and inequity (4, 5). For instance, women are assigned more advisees and take on more service and/or greater teaching loads, thus reducing their ability to obtain the same research achievements as their men counterparts. Women of color experience a "double bind" of discrimination owing to their gender and race/ethnicity, compounding difficulties in their pursuit of persistence in academia (6, 7). The current global pandemic is perpetuating the gender bias barriers women face in recognition and success. These barriers include economic compensation disparity and inequity in the three major pillars of academic evaluation: teaching, service, and research.

Because of known salary inequities for women faculty, especially women faculty of color, financial stressors are likely to be compounded by the COVID-19 pandemic and recession—particularly for households headed by women or single women, and predominantly for those in contingent faculty positions. Furthermore, some institutions are eliminating contributions to retirement accounts, a major issue for women who have an already well-documented pay gap and thus receive less in employer contributions to retirement, thereby exacerbating disparities in lifetime earnings.

As faculty positions are cut, contract renewals reduced, and departments eliminated, institutions must evaluate whether women and faculty of color are being impacted disproportionately. If salaries or contributions to retirement accounts are reduced to offset the financial burden of COVID-19, institutions should first assess pay equity and not uniformly make percentage- or tier-based cuts. An additional pay cut, especially for minoritized groups, would impart further academic and financial instability. Institutions that require faculty to provide a portion of their salary through grants must also be mindful of how this practice impacts women in academia.

Teaching and Service

Women in academia often hold contingent positions and experience higher-than-average teaching loads. They are assigned more remedial and introductory courses and counsel more students, including more students needing additional support (8). These inequities are amplified for faculty of color, who are often expected

to take on additional service and mentorship duties that align with the institution's goals of diversity and inclusion (7). Although institutions typically value service less than research or teaching when it comes to tenure and promotion, service consumes more time for women faculty compared with their men counterparts (9). Plus, students approach women faculty more for mental health support and expect them to be more nurturing (10).

The impacts of COVID-19 on academia will increase gender and racial inequity in teaching and service. For example, online teaching is more time consuming for those with heavier teaching loads, larger classes, and more student contact hours. Adding to this burden, instructors must attend to students in a time of high stress, exacerbating known gender inequalities in mentoring. Faculty of color are also expected to sustain the inclusive community of students at their institution—a form of underappreciated labor that carries a heavy toll. Because service obligations will continue, women must balance these tasks with increased teaching.

Administration, tenure, and promotion committees should be proactive, not reactive, in their discussion of how to handle the impact of COVID-19.

The Demands of Research

COVID-19's effects are driving more of a wedge between women and men in academia in terms of research opportunities (11). When disseminating scholarly work, women are already confronted with bias in peer review (12) and grant review panels (13). For example, women must be 2.5 times as productive to be judged as equally competent in grant applications. With the recent decrease in scholarly visibility, women are less likely to be invited to speak at conferences and seminar series, to serve as grant panelists, or be asked to review articles. These combined factors will lead to a quantifiable slump in publications and grant submissions from women.

By enlarging the academic pillars of service and teaching, COVID-19 will leave little, if any, time to pursue and maintain research funding or other scholarly activities. Already there are alarming signs in academia that echo the unintended negative career effects of parental leave. Whereas parental leave enhances men's research productivity, it adversely affects that of women. For example, journals in some fields are reporting a widening gender divide in article submissions (14).

These work-related challenges are further accentuated by higher demands at home because women are more likely to be called on to perform household tasks, care for (and now homeschool) their children, and/or care for aging parents and extended family. Thus, women will be less likely to successfully absorb the increase in workload owing to COVID-19 without having to drop some of their other responsibilities.

Old Problem, New Solutions

Many higher education administrators have begun to implement policies to mitigate the anticipated loss of productivity attributable to COVID-19. But these policies are gender neutral and thus do not address gender equity. In the case of teaching, some institutions are excluding student teaching evaluations for the spring 2020 term. To offset reduced research productivity, many institutions are offering tenure clock extensions. This approach may be good for first-year faculty and can be a source of significant stress relief for many other faculty members. However, the tenure clock extension has significant negative impacts on women. These extensions can exclude faculty members from positions of power that require tenure. It will prevent them from applying for large research center grants that require the primary investigator to be tenured. Tenure clock measures will also make the faculty member out of sync with funding mechanisms with time restrictions, such as years after PhD earned.

More importantly, extensions decrease long-term earning potential, especially if faculty have taken more than one extension. Women are unconsciously penalized for productivity loss when compared with men when tenure extensions have been granted [for example, in cases of parental leave (15)]. Thus, tenure and promotion clock extensions are not a panacea to accommodate faculty experiencing challenges and delays in the research domain.

We contend that the solution is a concerted investment in gender equality in academia (16). Instead of using biased gender-neutral reactions, which often help men over women (15), institutions need to be mindful and must take steps to protect the pipeline of women faculty. At the highest level, universities need to research the degree to which COVID-19 will impact the productivity of women and other minoritized faculty. We then encourage the university to respond to this impact by developing a strategic action plan, which includes metrics and accountability for dealing with changes in faculty productivity because of COVID-19. Additionally, in this piece, gender inequality in academia is discussed from a binary perspective, although gender is nonbinary and fluid. Our focus is gender—the diversity dimension with the most data on implicit and institutional bias. However, the proposed strategies to promote equity extend to other marginalized groups and any academic affected by COVID-19.

The first step in recognizing and correcting the presence of gender bias is to start an honest conversation within academia (Fig. 1; See SI for Question Guide). One feasible approach is to use a model like the reviewer onboarding process of the National Science Foundation (NSF). Before serving on any NSF review panel, panelists are required to watch a short video on the various types of biases that impact their judgment (17). This intervention puts panelists on level ground before reviewing. A low-stakes approach like this one that acknowledges gender biases related to the COVID-19 pandemic should be mandatory as faculty return to "normal" institutional operations.

Administration, tenure, and promotion committees should be proactive, not reactive, in their discussion of how to handle the impact of COVID-19. Faculty will need guidelines on how to quantify impacts of COVID-19 on their three academic pillars. Clear metrics, tangible benchmarks, and effective communication are critical for decreasing bias in merit and promotion decisions (for examples see refs. 17–20 and Fig. 1). Thus, for these recommendations to achieve their full impact, institutions should be held accountable. Most institutions have created multiple "COVID committees" to address the various and rapid changes happening in all aspects of their institutions. Here, we specifically ask that administrations empower either faculty governing bodies or designated faculty member(s) (e.g., creating a Pandemic Response Faculty Fellow or PFMC) to ensure the implementation of equity metrics and policies at their institutions.

The responsibilities of this faculty-led PFMC would be to work directly with administration as a conduit between the various levels of tenure and promotion committees across campus. Understanding that tenure and promotion metrics are different by department, evaluating impacts from COVID-19 will likely need to be tailored to each unit. The PFMC members will need to be a diverse group, trained on equity and informed of institutional equity policies, and be transparent about parity goals (Fig. 1). Note that asking evaluation committees to include women and individuals from diverse backgrounds will mean more service for some individuals, and this extra service should be valued and explicitly counted toward their merit and promotion.

The PFMC members will also be responsible for educating the various tenure and promotion committees across campus, specifically focusing on the ways these impacts will disproportionately affect women and faculty of color. Policies collectively created by evaluation committees and the PFMC will include goals, metrics, implementation guidelines, and recorded impacts of COVID-19 on faculty productivity in terms of tenure and promotion. Although it may be tempting to diminish the urgency of equity discussions during the COVID-19 pandemic because of the short-term public health concerns and economic challenges faced by many institutions, any distraction from the goal of gender equality will be detrimental. Actionable solutions are needed to ensure a diverse future for academia.

Higher education needs to fully acknowledge gender inequities as they are being intensified by this pandemic (for more on this topic see https://academicequity.com). Institutional actions should go beyond a box-checking exercise to address inherent gender biases that permeate all levels of the academic hierarchy, particularly merit, tenure, and promotion. These solutions can be applied to all academics and will benefit faculty in other marginalized groups affected by COVID-19. To effect real change, it is necessary to change how the academy thinks about gender equity and equity for all academics.

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