



Recommendations to Minimize Career Penalties for Parents in STEM Fields During the COVID-19 Pandemic

The COVID-19 pandemic has brought new challenges for STEM professionals who are also parents or caregivers, as many struggle to work from home full-time while providing care, a burden that disproportionately falls to women in households. The “mom penalty,” has long limited women’s professional success compared to male counterparts.¹ Now, the global COVID-19 pandemic and the social distancing necessary to address it have compounded our concerns about women’s success in scientific disciplines, worsening nearly every disadvantage that women already face.

The impacts on women scientists are by no means uniform. Women scientists of color face even steeper hurdles than white women as they reconcile the increased risk of COVID infection and death in communities of color² resulting from structural racism³, concerns about racist reactions to precautions such as masking⁴, and increased surveillance and policing⁵ in some communities to enforce social distancing.⁶ Such challenges have been further exacerbated by the ongoing trauma⁷ of racial profiling and police violence⁸ toward the Black community and Black mothers bear these costs⁹ disproportionately. There are also risks that equity initiatives be deprioritized¹⁰ during the pandemic because biased decision-making¹¹ is favored in times of stress.

These challenges make clear that there are many steps that scientific institutions and colleagues can and should take now to alleviate the burden and start to address the longstanding inequities that will be inevitably exacerbated by this crisis. Many Black scientists are speaking out¹² about the institutional racism they have encountered in academia and calling for a recognition and accomodation¹³ of the unique burdens they bear.

Accommodations to help avoid the promotion of lasting inequalities are crucial for leadership to implement as we recover from this crisis. However, such accommodations should be implemented not only in the wake of this crisis, but as standard policy for any STEM workers facing life circumstances that have the potential for long-term career impacts, be these pregnancy, parental leave,¹⁴ caring for sick family members,¹⁵ facing treatment for infertility,¹⁶ or facing serious illness or disability.¹⁷⁻¹⁹ We need work-family justice for STEM workers.²⁰

ALL EMPLOYERS: PROVIDE FLEXIBILITY AND TRANSPARENCY FOR EMPLOYEES DURING THE PANDEMIC AND AFTER

Workers with parenting responsibilities may not be able to work during standard business hours during the pandemic and it is also unreasonable to expect employees to work through the night, as sleep loss is shown to result in reduced work quality and to pose health and safety risks.²¹ Variable productivity or loss of productivity can be expected as families manage steeply increased obligations, often with diminished mental health²² or emotional wellbeing. It is important for all workplaces to look at what changes they can make both in the short and long term to help support employees as many impacts of the current crisis are likely to last long after the risk of COVID-19 infection decreases. For example, the childcare industry is currently on the brink of collapse²³ and many daycares face closures without significant government intervention. In addition, many will experience trauma as a result of the pandemic and are, thus, at increased risk of PTSD,²⁴ especially healthcare workers²⁵ and children.²⁶

OUR RECOMMENDATIONS FOR MANAGERS AND SUPERVISORS OF PARENTS IN STEM FIELDS

- Provide flexible hours and deadlines to the extent possible.
- Consider how team-based assignments might provide support, flexibility, accountability, and professional social connections for workers.
- As workplaces open up, allow parents to continue to work from home and otherwise have flexible schedules, as daycares and schools may not open fully in the same timeframe. Additionally, have contingency plans in place if the situation and risks suddenly worsen.
- Consider hiring additional staff or bringing on more students or interns to support the ongoing productivity of the lab. This is not the time for lean staffing.
- Be cognizant of assignments that may no longer be as feasible such as lengthy or last-minute meetings and formal speaking events that cannot be interrupted.
- Expect and create an environment that is welcoming to parents who may need to step away or bring a child into a professional meeting at times.
- As work from home has blurred the line between on and off the clock, encourage employees to take regular breaks and time off.²⁷
- Model stepping away and taking vacation time and communicate with your team about the value of self-care and recharging, *especially* when their productivity is diminished.
- Encourage staff to use paid time off available to them and use your discretion to reward teams with extra time off, when you can. Make sure your staff knows about FMLA policies and how they can be used flexibly.²⁸
- Know workers rights around discussing salaries and be aware of how pay secrecy supports gender and racial pay gaps.²⁹ Let employees know you support pay transparency and educate them on how knowing what others make is one step in reducing pay inequality.²⁰

- Ask your workforce what types of support would be helpful. Make it possible for feedback to be anonymous. Be open to feedback, even when it comes in a format or tone that makes you uncomfortable. Protect those who are asking for changes and accommodations from retaliation. Listen deeply, be creative, and resist the urge to maintain the status quo. If you are not personally impacted by discrimination and inequality, use your privilege to advocate for others.
- Importantly, in taking these steps, ensure you are not consciously or unconsciously withholding career opportunities for parent workers in favor of workers without caregiving responsibility. Look for ways to avoid a career penalty for parent workers.

PRINCIPAL INVESTIGATORS: SUPPORT EARLY CAREER STEM RESEARCHERS

Principal Investigators should be cognizant that it is beneficial to provide as much certainty as possible that training or degree programs are still viable for those in early career positions, including interns and graduate students with educational obligations such as coursework or thesis writing. It is also critical to consider the barriers post-doctorate academics face, such as challenges obtaining data for their projects; the cancellation of conferences, networking and job interviews; and uncertainty in funding. These issues will affect whether some early-career mothers are able to stay in science or academia.

OUR RECOMMENDATIONS

- Provide funding certainty, contract extensions, and flexibility on teaching responsibilities for early to mid career researchers with parenting responsibilities.
- Be creative in designing data collection procedures to minimize the impact of lost productivity.
- Consider how virtual meetings or conferences may fill the gap of providing networking opportunities.
- Provide an honest assessment of future job prospects and help employees search the range of academic, industry, government, and nonprofit opportunities.
- Look for opportunities to promote the intellectual contributions of women, especially women of color. In particular, look at your co-authorship, acknowledgement, and citation practices critically. Are you generous with writing opportunities? Is the author order of your publications determined by hierarchy in a project or by contribution to the work? Do you acknowledge everyone (even those in an early career stage or on staff) who contributes to the collection of your data in publications? How many women, especially women of color, are you citing?

UNIVERSITY ADMINISTRATORS: PROVIDE OPTIONS FOR FACULTY

Department heads, deans, and upper administration should think creatively about ways to facilitate accommodation for their hardest-hit faculty members, often either untenured or not on the tenure track. Faculty of color and faculty from other marginalized groups may be more impacted; thus, it is crucial that university leaders take steps to ensure existing inequities and challenges aren't worsened during the pandemic.

OUR RECOMMENDATIONS

- Develop policies, processes, and culture changes that help ensure the hardest-hit faculty are supported through this crisis.
- Consider creative accommodations, such as one-semester teaching releases or temporary no-cost release from service or advising responsibilities.
- Consider the pros and cons of [optional tenure clock stops](#) for pre-tenure faculty.³¹ Such moves may be a positive development, although for those who choose to take these accommodations, it could have negative longer-term consequences such as lower salaries and greater risk of job loss, as untenured faculty are more vulnerable to lay-offs.
- Consider whenever possible extensions of review periods for tenure or promotion, and also evaluations based on a shorter term, so as to not increase the financial burden and loss of salary that tenure and promotion extensions inevitably lead to.
- Be cautious in how to use student teaching evaluations, as they are susceptible to biases, which are likely to be amplified during the pandemic crisis when faculty and students are working under less-than-ideal circumstances.
- Additionally, if social distancing requires expansion of class times, avoid scheduling classes during times that may be less accessible to parent professors and students, such as in the early evening.
- Ensure faculty and staff who contribute to diversity, inclusion and equity initiatives are appropriately compensated for their expertise, and that their time and effort is respected by giving them direct access to decision-makers and the power to change policies. Do not expect people to devote significant time and expertise to these initiatives on a volunteer basis. Do not waste their time by limiting their role to awareness-raising.

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