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August 4, 2020

Dear National Science Foundation Leadership,

Recent research has demonstrated the disportionately negative effects of the global COVID-19 pandemic on the productivity of women scientists. Women are experiencing reductions in dedicated research time<sup>1</sup> and there is some evidence women are submitting fewer publications<sup>2,3\*</sup>. In particular, the productivity of early career women scientists with young children has been hard hit by the pandemic<sup>1</sup>. The National Science Foundation administers a highly prestigious early career award. Given the growing evidence that the productivity of women scientists is being disproportionately affected by the COVID-19 pandemic, we at 500 Women Scientists are writing to strongly recommend delaying the upcoming NSF CAREER solicitation deadline to ensure early career women scientists have the opportunity to apply.

500 Women Scientists is a grassroots, international organization with the mission to serve society by making science open, inclusive, and accessible and transform society by fighting racism, patriarchy, and oppressive societal norms. Our reach includes more than 450 local chapters (pods), thousands of members across the US and abroad, and almost 50,000 twitter followers. Our programs like the Fellowship for the Future, Request a Woman in STEMM, and Wikipedia edit-a-thons focus on elevating the contributions of women and especially underrepresented identities in science, and, relevant here, we advocate for women scientist parents through our SciMom Journeys project.

We understand that NSF, along with other science-supporting federal agencies, is balancing many priorities amid uncertainty. We appreciate that NSF has already postponed the deadline for the CAREER solicitation by 2 weeks because of anticipated hardships due to COVID19. Unfortunately, the pandemic has worsened in the United States and many parent scientists are still balancing full time childcare with their research and teaching duties, which includes rapid transitions of classes to an online format for the fall semester. We also know that women continue to carry more of the family caregiving responsibilities <sup>4,5</sup>, placing a larger burden on them

during this already trying time. Importantly, because of increased risk of COVID19 infection and higher death rates in communities of color, scientists who are women of color are likely to have even greater caretaking and family commitments. Therefore, we believe that early career and women of color faculty will be disproportionately disadvantaged by the late summer deadline.

In order for this year's CAREER solicitation to be equitable and just, we strongly recommend the deadline be delayed until such a time when the applications can be submitted in a more gender equitable way. We recommend, at earliest, a late fall semester deadline to allow early career faculty to at least get through the start of another difficult semester. Ideally, given the nature of the ever-changing pandemic situation and its potential long term effects on productivity of women scientists, a rolling deadline solicitation may be ideal, and should be strongly considered for future solicitations. Furthermore, we recommend that NSF begin considering how future solicitations will account for the "COVID-effect" on the productivity of women when evaluating applications (i.e. Intellectual Merit: How well qualified is the individual, team, or organization to conduct the proposed activities?).

The pandemic is exacerbating long-standing inequities in who has the opportunity to succeed in science and it threatens to dismantle the incremental progress on gender and racial equity that has been made in recent years. We hope NSF takes this opportunity to be a leader and fight against these lasting damages.

\*footnote: we acknowledge the ethical and methodological issues with publication which infer gender from author names.

Sincerely,

500 Women Scientists Leadership Team and Advisory Board

## Literature Cited

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