

# Corona Crisis: Impact on junior and women mathematicians

Open letter from the European Women in Mathematics

To Whom It May Concern,

The COVID-19 pandemic and ensuing full and partial lockdowns that this year swept across Europe and the world are unprecedented. Not all of the aftereffects are negative: As a group we have broadened our skills and horizons in digital teaching and online seminars. But the net impact on research and training in academia has been disastrous: Conferences were cancelled and collaborations stood still. Time slated for research splintered among the competing demands of home-schooling, eldercare, and quarantines. Networking and mentorship stalled. Common but often unaddressed mental health issues mushroomed – at a time when getting help was harder than ever.

Let us be clear about one fact:

*We did not experience the crisis equally.*

Untenured faculty lost more. Women lost more. Caregivers lost more. The more vulnerable the population, the greater the disadvantage.

No one chooses a pandemic, but now we can choose how to respond. We are writing to advocate a *proactive policy to support current employees in temporary positions and future job applicants* in mathematics in light of the Corona Crisis. We focus on:

- Untenured mathematicians, because the loss of travel and training opportunities, the slow-down in research productivity, and the uncertainty of the job market is most likely to have a long-term impact on their careers.
- Women, because statistically, women shoulder more of the burden of caregiving (for children and the elderly) and domestic tasks (for which help and other supports recently disappeared).
- Parents, because the shuttering of daycares and schools left them stranded. Suddenly and unexpectedly, parents had to provide constant care for young children and home-schooling for older children.

A proactive policy should not be gender-blind:

While acknowledging the role that some men play in caregiving, we recognize that statistically, women play a significantly larger role. Hence we are concerned that *we may lose talented female mathematicians during and following this crisis*. Women may choose to leave their profession or reduce their hours. Women in temporary positions may choose security and “settle” for lesser positions. Young women may opt not to pursue careers in science. The

COVID-19 pandemic has exacerbated existing gender inequities in mathematics and other sciences. *And gender-blind measures do not correct gender inequity.*

To those who say we should relax and trust the system, we remark that the system has not produced a gender-balanced representation in the sciences to date and *it would be naive to expect an automatic correction in the face of enormous burdens.*

To those who say that parents should take unpaid leave if childcare has been disruptive during the pandemic, we remark there is a difference between facing challenges and being unable to satisfy one’s job requirements. The vast majority of scientists work tirelessly – far beyond their contractual obligations – to achieve their goals. *The accomplishments of parents* during the pandemic – for both the workplace and the home – should *be recognized, not penalized.*

We advocate the following *proactive measures*:

- We encourage universities, governments, and funding agencies to invest in *extending the contracts* of researchers in temporary positions to offset the loss of productivity during the crisis. We advocate that these extensions give *particular consideration to women*. Perhaps savings due to cancelled travel and workshops can be redirected for this purpose.
- We encourage universities and funding agencies to award *release from teaching or teaching reductions* to untenured mathematicians who lost significant research time to digital teaching and caregiver responsibilities, again giving *particular consideration to women*. In case such measures are not possible, we advocate for allocating additional support via student assistants or other resources to reduce the teaching demands on junior colleagues.
- Evaluators on Hiring, Tenure, Prize, Grant, and other committees should be reminded that the crisis has impacted individuals very differently. It should be not the years past PhD but an *academic age, corrected for parental and other leaves*, that is the standard quantifier measured by committee members. Women with dependent children should be automatically eligible (although not required) *to subtract up to 12 months from their academic age* – for the purpose of hiring, grant eligibility, tenure deadlines, etc – due to disruptions from the COVID-19 pandemic. Men with minor children or researchers involved in eldercare during the crisis will be eligible if they can demonstrate that they were responsible for caregiving.



- We advocate *flexibility in deadlines and meeting times* especially for women with dependent children. The disruptions of the crisis may mean that it takes longer to review an article, finish a grant application, or return galley proofs. An early afternoon meeting might not be possible. Circumstances vary and allowing open conversations about needs and constraints is a necessary condition for a healthy workplace.

These are anxious times. The lockdowns may return. Europe needs more women in the sciences. Europe believes in the rights of dual-career families. Our response to the pandemic – whether swift and supportive or slow and cynical – will have broad and lasting impact. Let us shape

smart policy to recruit and retain a diverse group of talented young scientists.

Sincerely,

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the EWM Standing Committee and  
the EWM Working Group on the Corona Crisis

For more information or to sign, see  
[www.europeanwomeninmaths.org/ewm-open-letter-on-the-covid-19-pandemic/](https://www.europeanwomeninmaths.org/ewm-open-letter-on-the-covid-19-pandemic/)