



Statement from David Novog (June 15 2023)

Good afternoon. It is my pleasure to address this distinguished committee and provide my personal insights on the issue on graduate student scholarship and post doctoral fellow funding.

I obtained my PhD in a non-standard route at the time. While the bulk of my work was complete, I spent 1 year in Japan at a nuclear vendor and an additional year at Ontario Hydro, prior to formally completing my PhD in 2000. Before moving to McMaster, I spent several years at Ontario Hydro, its successor and spin off companies. I have been a professor in engineering for 17 years, specializing in nuclear energy and safety.

During this period I have directly graduated or supervised a total of 23 PhD students, 32 Masters students, and 9 Post doctoral students. It is not the numbers of which I am proud, it is the large impact these students are having in my industry and beyond. I strive to ensure my current students have the same access to mobility funding and advanced training that I received decades ago. I would like to discuss some of the specific challenges and impacts of funding on the numbers and opportunities provided to these students.

Firstly, a typical engineering graduate student receives funding that is a mix of scholarship provided by the University/Province, teaching assistant income, and scholarship provided by the supervising faculty member. Supplemental or alternative funding may be awarded from federal agencies such as NSERC, or private sector entities such as the Canadian Nuclear Society. In my experience some students may have access to funds of 45-55 thousand at the PhD level, or as little as 20-25 thousand. This low-end salary corresponds to an excellent student living at or below the poverty line in many jurisdictions – often they will seek employment driving for a delivery or car-sharing agency. While some diversity of funding is expected, and exceptional talent should be rewarded, this level of discrepancy should be examined. A system that had the flexibility to expand the number of students accessing funds in this lower income group is needed, in addition to ensuring the very top students are suitably rewarded.

Secondly, there is also a need to address the diversity of students at this level. Not all had the privileges and opportunities I encountered in my studies. There is a need to ensure proper support for those with partners, children, dependents, cohabitating family members and also to ensure funding for those who may have challenges related to their mobility or learning.



Additional funding supplements for students in these categories should be considered to assist in removing the barriers to entry.

Finally, and building on the previous topics, in many scientific and engineering disciplines we are experiencing an issue in attracting top-talent for these advanced degrees. While I receive many applications per week, not all are qualified for entry and most are not from Canadian Universities. Total stipends and an attractive labour market limit these applications to very few. Certainly a more sustainable and equitable scholarship program, accessible by a larger cohort would have some impact here. However, going back to my early studies, it was the international exchange of research and ideas that also drove me to seek higher degrees. Perhaps the Canadian government should consider a mobility award, over and above the limited ones currently available, to both act as an incentive for research and to cross pollenate ideas across boundaries. For example, our university receives many more international research exchanges at the graduate level from France than we send to France, simply because there are established and easily accessible federal and local funding opportunities in France to support these exchanges. Such a system would attract students with global research interests and provide additional incentive for graduate enrolment.

In conclusion, our goal should be to build an accessible and flexible funding system that can accommodate the diversity in student backgrounds, the increased value of international mobility, and the increased economic pressures from tuition and costs of living. Thank you very much for the invitation to speak and for your time and consideration.