CANADIAN ASSOCIATION OF PHYSICISTS



ASSOCIATION CANADIENNEDES PHYSICIENS ET PHYSICIENNES

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October 24, 2012

Isabelle Blain, VP NSERC 350 Albert St. Ottawa, ON K1A 1H5

RE: Funding major research facilities and the moratorium on the Major Resources Support (MRS) program

Dear Isabelle,

The Canadian Association of Physicists (CAP) applauds the government's desire to consult with the research community about how to fund major research facilities that are shared by many users and to consolidate relevant funding programs.¹

Until a new funding framework is implemented, however, the moratorium on the MRS program is premature. While the CAP was somewhat relieved to learn that some of these MRS-funded facilities will be preserved going forward, most facilities are not protected and are being denied re-application as their existing grants expire. Damage to Canadian research, including that of many of our members², continues to grow as the moratorium remains in place.³ It is, therefore, imperative that the moratorium be lifted to mitigate the damage that is already being done to these major research facilities.⁴ The MRS program must be maintained in order to preserve Canada's current strength in basic research.

In considering a new funding framework for the long term that may replace the MRS program, which has been a Canadian success story, the CAP would draw your attention to these positive features of the program that should be preserved:

- Grants are awarded on the basis of a periodic *competitive* peer review process, a hallmark of NSERC programs.
- Discovery grant (DG) holders from across Canada are provided a *cost-effective and efficient* means to contribute collectively to the operating funds of facilities, in lieu of full cost-recovery fees to individual researchers.⁵
- Linking a facility's operating funds to its user community creates a powerful *accountability* mechanism to ensure that the facility remains responsive to the needs of its users.⁶

NSERC is the only agency that can act immediately to resolve the funding gaps⁷ by lifting the moratorium. The CAP believes that NSERC can do that by reconsidering its cross-program funding allocations because MRS funds support a wide range of research programs.

As this letter is intended to provide support for a crucial NSERC program and basic research in general, please feel free to share this letter with Industry Canada or distribute it in any way that you feel would be useful.

Best regards,

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Copies to:

Gary Goodyear, Minister of State for Science and Technology. Stewart Kennedy, NDP Critic for Science and Technology. Ted Hsu, Liberal Critic for Science and Technology.

¹ "[The MRS program] has just received a moratorium as we seek council from our scientists. ... We are looking at ways to consolidate the programs." Gary Goodyear, on CBC's *All in a Day*. May 16, 2012. "With regard to the MRS Program, NSERC intends to consult with stakeholders on how to support access to—and the operating costs of—Canada's major national resources." Gary Goodyear. Letter to David Bryce. July 18, 2012.

² 61% of physicists across Canada indicated that the loss of the MRS program will negatively impact their research programs in the CAP's May 2012 survey: http://www.cap.ca/en/news/2012-08-27/summary-capnserc-survey-results-and-observations.

³ MRS grants are typically for 3 years. Many expired in 2012 and renewals were completely denied or granted only a fraction of former funds for one year. Facilities whose grants are expiring in 2013 are already being denied reapplication. Facilities whose grants are expiring in 2014 are at risk unless a new framework is implemented soon, since the funding competition may take up to a year.

⁴ "[The moratorium] may force as many as one third of the facilities receiving MRS funding in 2011 to close, mothballing at least \$80 million in unique scientific equipment. Surviving facilities will have to fire staff and reduce services, with many unable to repair or upgrade multi-million dollar equipment." Kennedy Stewart. *Pennywise, Pound Foolish: Major Resources Support Program Moratorium Impact Report.* August 2012. This report found at least 8 facilities that will close, including: 1) The National High Field Nuclear Magnetic Resonance Centre; 2) The National Ultrahigh-Field NMR Facility for Solids; 3) The Canadian Centre for Isotopic Microanalysis; 4) The Canadian Charged Particle Accelerator Consortium; 5) Advanced Laser Light Source, and 3 others that remained anonymous.

⁵ The DG system generally does not provide a means for individuals to pay facility access fees at cost recovery rates. For example, a typical two-week beam time allocation at the Canadian Neutron Beam Centre (CNBC) would cost over \$100K, more than twice a typical DG grant in physics. In lieu of such fees, users of neutron beams collectively apply via the MRS program for a lump sum contribution to maintain the CNBC in a state of readiness for their access.

⁶ For example, an oversight committee of neutron beam users monitors the use of the MRS funds at the CNBC and reports its findings directly to NSERC. Users of large-scale research infrastructure require a strong collective voice in the operational priorities of their respective facilities. The university astronomy community is calling for a greater voice in operational matters of the astronomy facilities operated by the National Research Council (CASCA. *A Vision for Canadian Astronomy: 2010-2020*. http://www.casca.ca/lrp2010/). The neutron beam user community is advocating an extension of the MRS model to the governance and funding of the reactor on which the CNBC depends. (CINS. *Expression of Interest in AECL*. March 30. 2012 http://www.cins.ca/reports.html#EOIAECL. p15).

⁷ Alternatively, introducing a new program at the Canada Foundation for Innovation to replace the MRS program will take time and would require a significant change in its role, which is currently focused on funding one-time capital projects, not on-going operating costs of facilities.