



National
Defence

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ASSISTANT DEPUTY MINISTER (SCIENCE AND TECHNOLOGY)
DEFENCE RESEARCH AND DEVELOPMENT CANADA (DRDC)



Defence Research and Development Canada (DRDC) is seeking to engage Canada's academic community to create a Centre of Expertise on Human Systems Performance (HSP)

The participation of members of the Canadian academic community is sought for the creation of a Centre of Expertise on HSP. DRDC's aim is to facilitate the formation of a multidisciplinary, academic-led network of affiliates and stakeholders from across Canada, brought together to find innovative solutions to defence and security HSP challenges. The Centre's scope will span the full range from concepts to mature technologies.

HSP refers to research in four non-mutually exclusive areas:

1. **Computational aspects of cognitive optimization** – including research into human computer interactions, stimulation, visualization, and ubiquitous computing.
2. **Physiology of performance optimization** – including research in perception, human enhancement/augmentation, biomechanics, and ergogenic aids.
3. **Automation and robotics** – including research on user-computer interfaces, semi-autonomous control, virtual reality, telepresence, and wearable technology.
4. **Ethics** – including analysis of legal issues and social attitudes on aspects of human optimization, transhumanism and trust.

Funding

DRDC is allocating significant long-term funding for this initiative. Funds will be invested in HSP research using open competitions (via grants, contributions and contracts) with the aim of promoting innovative and collaborative approaches to solve defence and security HSP challenges.

Workshop

A one-day workshop in Toronto will be held on February 27th, 2017. The workshop is intended to introduce DRDC's specific defence and security challenges and needs with regard to HSP, and to provide a forum for academic researchers to explore how their expertise and interests could contribute to the creation of a national HSP Centre of Expertise. An optional half-day workshop extension and half-day visit of the DRDC Toronto Research Centre is planned immediately following the workshop for those interested. This visit will consist of a tour of the facilities and networking opportunities with DRDC scientists and Canadian Armed Forces subject matter experts working in HSP.

Call for affiliates

Principal investigators from the Canadian academic community engaged in research related to one or more of the identified HSP areas are invited to express their interest in being a part of this initiative, and to participate in this workshop. Interested researchers are requested to complete and return the attached information sheet before November 15th, 2016 by email to DND.DRDC-COE-HSP.MDN@forces.gc.ca. Applicants will be contacted shortly after receipt of their expression of interest.

Important Dates

November 15, 2016: Deadline for submission of Affiliate information sheets (attached).

February 27-28, 2017: One-day workshop, followed by half-day visit of DRDC Toronto Research Centre.