

## **Centre of Expertise on Human Systems Performance - Innovation for defence challenges**

### **Sponsor**

Defence Research and Development Canada (DRDC)

### **For More Information**

[Affiliate Information Form and Program Description](#) [1]

### **Description**

Defence Research and Development Canada (DRDC), the Science and technology organization for the Department of National Defence, is seeking to engage the Canadian academic community to create a Centre of Expertise on Human Systems Performance (HSP). This new Centre of Expertise is to be part of the Institute for Research in Defence and Security (IRDS). The attached documents provide information on the initiative and solicit expressions of interest in participating in the first workshop on HSP to be held in Toronto on 27<sup>th</sup> February 2017.

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.

A one-day workshop in Toronto will be held on February 27<sup>th</sup>, 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.

## **Funding Availability**

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.

## **Deadlines**

**If College-level review is required, your College will communicate its earlier internal deadlines.**

Type	Date	Notes
<b>External Deadline</b>	Tuesday, November 15, 2016 - 4:30pm	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 <a href="mailto:DND.DRDC-COE-HSP.MDN@forces.gc.ca">DND.DRDC-COE-HSP.MDN@forces.gc.ca</a> [2]. Applicants will be contacted shortly after receipt of their expression of interest.

For Questions, please contact

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