

## **Silvia Ursula Raschke, PhD**

Dr. Silvia Raschke has a PhD in Prosthetics and Orthotics from Strathclyde University's Faculty of Engineering (1997). She is the Principle Investigator for the Centre for Rehabilitation Engineering and Technology that Enables (CREATE). CREATE is a collaborative venture between BCIT and the Neil Squire Foundation that was funded by the Canadian Foundation for Innovation and the B.C. Knowledge Development Fund (2001).

Dr Raschke's applied research activities centre on device development and evaluation, in particular safety devices, assistive/rehabilitation technology, veterinary initiatives and projects in the area of policing. Her expertise focuses on working with the end users of technology and devices to clearly define problems and develop solutions that are practical and that have relevance to individuals in their daily lives - be it a disabled person, a veterinary technician or police constable.

Her most recent initiative is working to expand the scope of CREATE under the theme of "Healthy and Safe Communities" to formally include projects beyond what is traditionally thought of as rehabilitation engineering. This includes initiatives supporting safer workplaces, safer and more accessible communities and a very unique element – the development of a Canine Performance and Health Initiative that would support research on the health and safety of police and other working dogs – a first in the world.

Completed and ongoing project work, in the area of policing includes:

- Evaluation of Trouser Designs for Female Police Officers (ongoing)
- Identifying structural modifications in grow operations and assessing their impact on first responder safety and building envelope durability – a pilot study (ongoing)
- Effect of Canine Ballistic Vests on Body Core Temperature and Movement of Police Canines (2012)
- Identification of Risk Factors in Police Vehicle Cockpits (2011)
- Development of a Collaborative Approach to Ensuring the Health and Safety of Persons with Disabilities when Interacting with Law Enforcement Officers (2011)
- Informal evaluation of canine ballistic vests (2007)

Career highlights include

- CREATE Steering Committee (2001-present)
- Vice President BCIT Faculty and Staff Association (2012-2014 term)
- BCIT Faculty and Staff Association Executive Committee Member (2008-2012)
- Project Leader BCIT Technology Centre (2001-present)

Silvia also assisted with the writing of a second successful CFI Grant, which provided the infrastructure for the Dr Tong Louie Living Laboratory, as well as assisting in obtaining a \$100,000 grant from the Vancouver Police Foundation, a very generous gift granted to VPD Staff Sgt Gordon McGuinness, which has allowed the development, in partnership with BCIT, of infrastructure essential to the research on police dog performance and health. Her work on canine initiatives can be viewed at the following links:

<http://www.bcit.ca/appliedresearch/canine>

<http://www.knowledgenetwork.ca/leadingedge/2008/index.html> (see 'Canine Cop Cares')