“Autonomic Dysfunctions and Autonomic Monitoring Following Spinal Cord Injury”

Summary:

This 35 credit hours course is being developed by expert educators from the University of British Columbia (UBC) / the International Collaboration On Repair Discoveries (ICORD) under the leadership of Dr. A. Krashioukov, the world-renowned leader in autonomic dysfunctions and spinal cord injury (SCI). Course participants will be provided with the latest evidence-based information on autonomic dysfunctions and autonomic monitoring following SCI. This interactive course will be offered in a small group format over 5 days with educator directed education sessions (2 hours/day), daily practicums (3 hours/day), and self-study sessions (2 hours/day).

This course is open to clinician scientists with an interest in SCI and autonomic dysfunctions. This course will be of interest to physicians, medical residents, nurses, as well as physical and occupational therapists involved in the care or conducting research with individuals with SCI.

Learning Objectives

At the end of this course, participants will be able to explain the complexity of autonomic dysfunctions following SCI including specifics of anatomy and physiology as well as the latest evidences from basic and clinical research in diagnosis and management of autonomic dysfunctions following SCI. Participants will also have an understanding of the latest technology used in the evaluation of autonomic dysfunctions.

Specific learner-centered objectives include the ability to:

1. Describe vasculature changes after SCI and the effects of different intervention strategies;
2. Describe cerebrovascular changes after SCI and advances in clinical management;
3. Demonstrate an understanding of international classifications for SCI and their practical implementation;
4. Identify strategies for effective management of neurogenic bladder and bowel dysfunctions after SCI;
5. Demonstrate an understanding of other areas that affect quality of life for individuals living with SCI such as: pain management, sexuality and reproduction, as well as family and community living;
6. Describe the latest advances in autonomic assessments of individuals with SCI.
Course Dates

This course will be offered throughout the year according to demand. Please contact the course facilitator, Dr. Andrei Krassioukov, to learn about the next available session.

Course Details

Each course runs Monday to Friday from 9:00 a.m. to 5:00 p.m., in Vancouver, BC. Location details will be provided upon confirmation of registration.

A maximum of 10 participants will be accepted into each course.

Tuition

CPSO members: $4,550 plus GST
Non-CPSO: $5,250 plus GST

Payment can be made online at time of registration, by cheque or by phone.

Confidentiality

Discussions that take place during this program will be considered private and confidential by all participants and facilitators.

Cancellation Policy

UBC reserves the right to cancel this course due to insufficient registrations or circumstances beyond its control. Registrants will be notified at the earliest possible date in the event of a cancellation. Tuition fees for courses cancelled by UBC will be refunded in full, however UBC will not be liable for any loss, damages or other expenses that such cancellations may cause.

Refund Policy

A notice of cancellation must be received in writing 15-business days prior to the program date. 20% of the tuition fee will be charged for cancellations received on or before this date. UBC regrets that refunds cannot be offered after the notice of cancellation deadline.
Accreditation

As an organization accredited to sponsor continuing medical education for physicians by the Committee on Accreditation of Continuing Medical Education (CACME), the UBC Division of Continuing Professional Development designates this educational program as meeting the accreditation criteria of the College of Family Physicians of Canada for up to 35 Mainpro-M1 credits. This program is an Accredited Group Learning Activity eligible for up to 35 Section 1 credits as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada. This program has been reviewed and approved by UBC Division of Continuing Professional Development. Each physician should claim only those credits he/she actually spent in the activity.

Course Syllabus:

Day 1:  

*Interactive Education Session (2 hours):*  
Pre-course Knowledge Assessment (Survey);  
Overview of Autonomic Nervous System;  
Overview of Spinal Cord Injury (SCI);

*Learning Objective 1:* To learn about anatomy and physiology of Autonomic Nervous System  
*Learning Objective 2:* To appreciate the concepts of severity and completeness of spinal cord injury (American Spinal Injury Classifications)

*Interactive Practicum (3 hours):*  
Clinical Assessment of Patients with SCI;  
Overview of the International Classifications and Tools - ASIA and ISAFSCI Assessments;  
Case Scenario;  
Use of Sympathetic Skin Responses for Assessment of Completeness of Injury of Autonomic Nervous System;

*Self-Study (2 hours):*  
Reading (Articles, Classifications)
Day 2:  
**Interactive Education Session (2 hours):**  
Overview Autonomic Dysfunctions and Autonomic Monitoring Following SCI  
Autonomic Dysreflexia: Overview; Diagnosis; Management; Prevention

*Learning Objective 1:* To appreciate the complexity of autonomic dysfunctions following spinal cord injury.  
*Learning Objective 2:* To understand concept of autonomic dysreflexia; management, and prevention.

**Interactive Practicum (3 hours):**  
24-Hour Blood Pressure Monitoring;

**Self-Study (2 hours):**  
Reading (articles, classifications)

Day 3:  
**Interactive Education Session (2 hours):**  
Autonomic Dysfunctions after SCI - Orthostatic Hypotension (OH): Overview; Diagnosis; Management; Prevention

*Learning Objective:* To understand the concept of orthostatic hypotension; diagnosis, management, and prevention.

**Interactive Practicum (3 hours):**  
Tilt-table Evaluation

**Self-Study (2 hours):**  
Reading (Articles, Classifications)

Day 4:  
**Interactive Education Session (2 hours):**  
Bladder Management; Bowel Care and Management;

*Learning Objective 1:* To appreciate the complexity of bowel and bladder dysfunctions following neurological dysfunctions.  
*Learning Objective 2:* To understand latest advances in diagnosis and assessment of neurogenic bowel and bladder.

**Interactive Practicum (3 hours):**  
Use of Blood Pressure Monitoring During Urodynamic Studies; Use of Cardiovascular Monitoring During Bowel Care;

**Self-Study (2 hours):**  
Reading (Articles, Classifications)
Day 5:  

*Interactive Education Session (2 hours):*

Sexuality and Fertility after SCI;

*Learning Objective 1:* To appreciate the complexity of sexual dysfunctions following spinal cord injury.
*Learning Objective 2:* To understand present advances in management of sexual dysfunctions after spinal cord injury.

*Interactive Practicum (3 hours):*

Cardiovascular Monitoring During Vibrostimulation and Sexual Activities;

*Final Session (2 hours):*

Final Discussion;
Post-Course Knowledge Assessment (Survey);
Course Evaluation.

Course Faculty:

1. Professor A. Krassioukov, MD, PhD, Division of Physical Medicine and Rehabilitation, Faculty of Medicine, UBC; Chair, Rehabilitation Medicine, Associate Director and Scientist, Director of Autonomic Research Unit, ICORD; Staff physician, Spinal Cord Program, GF Strong Rehabilitation Centre, VGH
2. Professor S. Elliott, MD, Departments of Psychiatry and Urologic Sciences, Faculty of Medicine, UBC; Medical Director, BC Centre for Sexual Medicine; Co-Director, Vancouver Sperm Retrieval Clinic; Medical Director, Men's Sexual Assessment and Rehabilitation Service, Prostate Centre; Physician Consultant, GF Strong Sexual Health Rehabilitation Service, VGH
3. Dr. Stacy Bhola-Reebye, MD, CCFP, Hospitalist, GF Strong Rehabilitation Centre, Vancouver, BC
4. Dr. A. Phillips, PhD (Medicine), International Collaboration on Repair Discoveries, Autonomic Research Laboratory; Centre for Heart, Lung, and Vascular Health, UBC; Heart and Stroke Foundation - Research Fellow; Craig H. Nielson Foundation - Postdoctoral Fellow; Michael Smith Foundation for Health Research - Postdoctoral Fellow
5. Ms. S. Hocaloski, RN, BtechN, Sexual Health Clinician, Blusson Spinal Cord Center, VGH