Cardiovascular Ultrasound in Health & Exercise Sciences

Centre for Heart, Lung and Vascular Health
University of British Columbia – Okanagan Campus

13 July – 17 July 2015

Registration closes: May 1 2015 (spaces limited; early registration recommended)
Organizing Committee:
Phil Ainslie, Keith George, Daniel Green, Neil Eves, Glen Foster, Nia Lewis, David Oxborough, Helen Jones, Kate Thomas, Rob Shave, Mike Stembridge, Howard Carter, Kurt Smith, Tony Bain

Overview:
This summer school is aimed at students, researchers and academics wishing to develop vascular, cardiac and/or cerebrovascular ultrasound skills. The knowledge and practical skills gained on this intensive course will initiate the use of ultrasound applications in Health and Exercise Sciences research studies. Theoretical and practical sessions taught by qualified and research experienced clinical vascular and cardiac ultrasound personnel.

Participants:
Limited to 30 per day

Costs (including lunch):
Faculty:
$400 per day or $1500 for 5 days
Postdocs and Professionals:
$350 per day or $1250 for 5 days
Graduate Student Fee:
$300 per day or $1000 for 5 days

Register at: https://cbm.ok.ubc.ca/hsd/hes/chlvh_cuss/registration.php

More information regarding the course, accommodation and directions will be available soon at http://chlvh.ok.ubc.ca

If you require further information please contact Dr. Phil Ainslie (contact email: philip.ainslie@ubc.ca)

Vascular Imaging Course

Day 1 (9am to 6pm)

Basic Principles of Ultrasound
B-mode in peripheral vascular scanning

Techniques and Skills Development
Pulsed wave spectral doppler

Skills Development and Data Collection
Intimal medial thickness (IMT)

Afternoon Presentation
Application of vascular ultrasound in sports science & human physiology – Prof. Daniel Green

Social – Golf, climb, wine tasting*

* Events will be organized according to demand at a small additional cost

Day 2 (9am to 6pm)

Flow-mediated dilation

Conduit artery imaging – blood flow

Edge detection and wall tracking

Social – Golf, climb, wine tasting*

* Events will be organized according to demand at a small additional cost

Cerebrovascular Imaging Course

Day 3 (9am to 6pm)

Talk and Morning Presentation
Regulation of human cerebral blood flow – Prof. Phil Ainslie

Basic principles of transcranial doppler ultrasound – intra-cranial screening and insonation

Skills Development, Data Collection and Analysis
Assessment of cerebrovascular reactivity, autoregulation and neurovascular coupling

Imaging of blood flow in internal carotid and vertebral arteries

Transcranial color coded duplex – imaging of MCA diameter and development of automated software

Social – Golf, climb, wine tasting*

* Events will be organized according to demand at a small additional cost

Cardiac Imaging Course

Day 4 (9am to 6pm)

Basic Principles of Ultrasound
Transthoracic echocardiography

Techniques and Skills Development
2D & M-mode

Skills Development and Data Collection
Equipment & image optimization – 2D & M-mode

Afternoon Presentation
Impact of acute exercise on ventricular function – Prof. Keith George

Social – Golf, climb, wine tasting*

* Events will be organized according to demand at a small additional cost

Day 5 (9am to 4pm)

Doppler imaging

Doppler and tissue doppler

Equipment & image optimization – doppler assessment of intracardiac shunt and intrapulmonary arteriovenous anastomoses

Social – house boat ride and dinner on lake Okanagan**

** $50 for additional tickets (e.g. for partner / spouse, etc.) This cost is included upon registration for 3 or more days