



**Canadian Society for Vascular Surgery
Soci t  canadienne de chirurgie vasculaire**

**41st Annual Meeting
September 13-14, 2019
Delta Grand Okanagan Resort, Kelowna BC**



FINAL PROGRAM

Welcome to Kelowna!

It is our pleasure to welcome you to the Canadian Society for Vascular Surgery's 41st Annual Meeting in the beautiful Okanagan Valley. The meeting promises to be an exceptional event, featuring timely, insightful, and relevant scientific sessions. Our invited guest speaker, Alison Halliday, Professor of Vascular Surgery at the University of Oxford and Past President of the European Society for Vascular Society, will be giving two talks during the meeting.

As the primary Canadian gathering for the vascular surgery community, this meeting provides a forum for continuing medical education for vascular surgeons and others interested in the investigation and treatment of patients with vascular disease.

An exciting two days are in store giving you an opportunity to stay abreast of vascular developments, network with your peers, socialize and increase your CPD hours.

Have a great meeting!

Dr. April Boyd
CSVs President

Dr. Heather Gill
2019 Program Chair

CSVS EXECUTIVE COMMITTEE

Dr. April Boyd, President,
Dr. Keith Baxter, President Elect
Dr. Kent MacKenzie, Past President
Dr. Rafik Ghali, Past, Past President
Dr. John Harlock, Secretary
Dr. Joshua Koulack, Treasurer
Dr. Heather Gill, 2019 Program Chair
Dr. Ted Rapanos, 2019 Assistant Program Chair
Dr. Kirk Lawlor, LOC 2019 Chair
Dr. George Oreopoulos, Education Chair
Dr. Graham Roche-Nagle, Quality & Outcomes Chair
Dr. Luc Dubois, Research Chair
Dr. Thomas Lindsay, RCPSC Representative
Dr. Dion Davidson, Member at Large East
Dr. Ricardo Ruz, Member at Large, Central
Dr. Paul Petrasek, Member at Large, West
Dr. Varun Kapila, Webmaster

INTERACTIVE MEETING

Delegates will be actively participating in the meeting by using touchpads to provide feedback via the Audience Response System that will be used during the plenary sessions and VSEP Jeopardy.

INVITED GUEST SPEAKER



We are pleased to welcome Professor Alison Halliday as the 2019 CSVS invited guest speaker. Professor Halliday is currently Professor of Vascular Surgery at University of Oxford in the UK, Past President of the European Society for

Vascular Society and sits on the European Society for Cardiology (ESC) Council on Stroke.

Professor Halliday was the principal investigator in the Asymptomatic Carotid Surgery Trial (ACST-2), one of the world's largest clinical surgery trials, involving thousands of patients from 30 countries. We look forward to her presentations in Kelowna.

WHY YOU SHOULD ATTEND!

As the premier meeting of the Canadian Society for Vascular Surgery, this conference provides several unique and engaging educational opportunities for the participants:

- Network with colleagues from across Canada
- Translate scientific discoveries into your practice
- Raise questions, debate the issues, plan follow-up studies, and discuss results;
- Discuss your own research and observation
- Meet with poster presenters to learn about their research objectives; and
- Visit a number of exhibit booths featuring products specifically designed for the treatment of vascular diseases.

TARGET AUDIENCE

The CSVS Annual Scientific meeting is intended for clinicians, researchers, trainees/students, and allied health professionals involved in research, treatment and management of vascular diseases.

CSVS VISION

To Lead Vascular Care in Canada

CSVS MISSION

The Canadian Society for Vascular Surgery is dedicated to excellence in the promotion of vascular health for Canadians through education, research, collaboration and advocacy

ANNUAL GENERAL MEETING

For CSVS members only

Friday, September 13th - 12:00-1:30pm
Vasseaux/Kootenay

ACCREDITATION - (Section 1)

*This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification program of The Royal College of Physicians and Surgeons of Canada, approved by the Canadian Society for Vascular Surgery. **The maximal CME credit is 13 hours.***

AMA PRA Category 1 Credit™

Through an agreement between the Royal College of Physicians and Surgeons of Canada and the American Medical Association, physicians may convert Royal College MOC credits to AMA PRA Category 1 Credits™. Information on the process to convert Royal College MOC credit to AMA credit can be found at:
www.ama-assn.org/go/internationalcme.

CERTIFICATE OF ATTENDANCE

The 2019 Certificate of Attendance will be posted on the CSVS Website and available for downloading following the meeting.

PROGRAM CHANGES AND CANCELLATIONS

CSVS reserves the right to substitute faculty or to cancel or reschedule sessions because of unforeseen circumstances.

MOBILE APP

The CSVS 2019 annual meeting mobile app allows you to access the full schedule, presenters, podium and poster presentations and be alerted of any changes to the program electronically.

Installing The App: enter www.eventmobi.com/csvs2019 into your browser.

DISCLOSURE

Faculty and Moderator Disclosure: Current CME guidelines state that participants should be aware of any affiliation or financial interest that could affect the speaker's presentation(s). Faculty and moderators have completed conflict of interest declarations and those potential conflicts will be announced at the beginning of each session.

The intent of this disclosure requirement is for a speaker to declare the conflict/relationship, in advance, to the audience. It is intended that any conflict be openly identified so that with full disclosure of the facts, attendees may form their own judgments about the presentation.

In addition, all members of the annual scientific program committee have also completed their declaration and have announced at each teleconference or meeting any financial interest in commercial organizations that may have a direct or indirect interest in the subject matter of his/her presentation. A "financial interest" may include, but is not limited to, being a direct shareholder in the organization; being on retainer with the organization; or having research or honoraria paid by the organization. An "affiliation" may be holding a position on an advisory committee or some other role of benefit to a sponsoring organization.

DISCLAIMER

The material presented at this meeting represents the opinion of the speakers and not the views of the CSVS. Attendees participating in this medical education program do so with full knowledge that they waive any claim they may have against the CSVS for reliance on any information presented during these educational activities. The CSVS does not guarantee, warrant or endorse any commercial products or services.

VISIT OUR 2019 SPONSORS AND EXHIBITORS

The CSVS meeting has proven to be a great opportunity for a collegial interchange of ideas and product information between physicians and our corporate partners. The exhibit area is the exclusive room for meals and breaks. The exhibiting companies will provide you with the latest information on products in the field of vascular surgery. Information on our corporate partners is included in the CSVS mobile app. Please visit the exhibit hall (South Ballroom) to meet our sponsors. Exhibiting companies are our benefactors and major resource for our annual meetings and we encourage all our members and guest delegates to visit and support our corporate partners.

Exhibit dates and times: Friday, September 13th

7:00-7:45am, 9:30-10:00am, 12:00- 1:30pm, 2:45-3:15pm

Saturday, September 14th

7:00-8:00am, 10:15-10:45am, 12:15pm – 1:30pm, 3:15-3:45pm

SOCIAL EVENTS

The CSVS will be holding two social events that will provide you with an opportunity to connect with fellow delegates in a more relaxed environment.

- Wine & Cheese and Poster viewing in the Foyer on Friday, September 13th from 5:00 to 6:00pm in the Grand Foyer.
- CSVS Annual Dinner on Saturday September 14th which will be held at the Mission Hill Winery. Tickets are limited and must be purchased in advance (\$150 each).



Follow us on Twitter!

Use **#CSVS2019** to tweet & share what you're learning in Kelowna.



Educational Objectives of the CSVS 41st Annual Meeting

1. Participants will be able to review and discuss non-operative and surgical approaches to thoracic aortic pathologies.
2. Participants will understand new alternatives of treatment that will help to manage peripheral vascular disease.
3. Participants will explore the state of Vascular Surgery as a specialty across Canada.
4. Participants will learn understand the role of perioperative medicine in the outcomes of vascular surgery patients.
5. Participants will review the history and current status of Carotid trials.
6. Participants will be able identify and discuss novel treatment option that are available for venous insufficiency management.
7. Participants will review and assess the durability of vascular access procedures.
8. Participants will explore and learn on novel current endovascular aneurysm repair techniques.
9. Participants will have a better understanding of aneurysm surveillance and also be able to identify factors that impact post-operative outcome following open aortic aneurysm repair.
10. Participants will be able to identify their own knowledge gaps by participating in VESP Jeopardy.

The program will provide scientific or clinical presentations by the general membership and will provide the opportunity for the participant to discuss and contribute opinions and evaluations. Authors of accepted abstracts are encouraged to submit manuscripts for peer-reviewed publication.

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Canadian Society for Vascular Surgery

41st Annual Meeting

September 13-14, 2019

Delta Grand Okanagan Resort, Kelowna BC

Thursday, September 12 | jeudi le 12 septembre 2019 (Pre-Meeting)

8:00am 11:30am	Quality & Outcomes Committee Meeting - Selkirk
12:00pm 6:00pm	Exhibitor move in & Poster board set up - South Ballroom
12:00pm 1:00pm	CSVV Executive Committee Luncheon (closed)- Selkirk
1:00pm 4:00pm	CSVV Executive Committee Meeting (closed) - Selkirk
4:30pm 9:00pm	RCPSC Vascular Surgery Specialty Committee Meeting (closed) Cassiar/Cascade
6:00pm 8:00pm	CSVV Registration Desk Opens - Coat Check

Friday, September 13 | vendredi le 13 septembre 2019

7:00am	CSVV Registration Desk Opens - Coat Check
7:00am 7:45am	Exhibits & Continental Breakfast - South Ballroom
7:45am 8:00am	<p>Welcome and Opening Remarks - Okanagan</p> <p>President: Dr. April Boyd</p> <p>Program Chair: Dr. Heather Gill</p> <p>Secretary: Dr. John Harlock</p>
8:00am 9:30am	<p>Paper Session I - THE THORACIC AORTA - Okanagan</p> <p><i>Moderator: Dr. Jason Bayne</i></p> <p><i>Learning Objectives - At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> 1. Gain a further understanding of differences between open and endovascular treatment of thoracoabdominal aortic aneurysms. 2. Gain a further understanding into the treatment of acute type B dissections. <p>8:00-8:15 -A Systematic Review and Meta-Analysis of Endovascular Juxtarenal Aortic Aneurysm Repair Demonstrates Lower Perioperative Mortality Compared to Open Repair - R. Doonan</p> <p>8:15-8:30 Early and Late Population-based Thoracoabdominal Aortic Aneurysm Outcomes Following Endovascular and Open Repair - R. Rocha</p> <p>8:30-8:45 Health Care Costs of Endovascular Compared to Open Thoracoabdominal Aortic Aneurysm</p>

	<p>Repair -R. Rocha 8:45-9:00 Evaluation of aortic zone 2 landing accuracy during TEVAR following carotid-subclavian revascularization - S. Choi 9:00-9:15 Local and Regional Management Variation after Acute Type B Aortic Dissection Accompanies Regional Disparities in Post Dissection Mortality in Ontario - M. Witheford 9:15-9:30 Impact of Thoracic Endovascular Aortic Repair Timing on Aortic Remodeling in Type B Aortic Intramural Hematoma - F. Alie-Cusson</p>
9:30am 10:00am	Refreshment Break and Exhibits – South Ballroom
10:00am 11:00am	<p>Paper Session II PAD - Okanagan Moderator: Dr. Matt Robinson <i>Learning Objectives - At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> 1. Gather further knowledge into novel endovascular treatment options of PAD. 2. Explore different anesthetic approaches to arterial revascularization. <p>10:00-10:15 Performance Assessment of a Novel Steering Catheter for Crossing Peripheral Arterial Occlusions - T. Roy 10:15-10:30 Association Between Hemodynamic Response and Reintervention following Endovascular Revascularization for Atherosclerotic Peripheral Vascular Disease - M. Rockley 10:30-10:45 Concomitant iliac endovascular procedure does not adversely affect outcomes during lower extremity infrainguinal bypass - D. Dion 10:45-11:00 Type of Anesthesia For Lower Extremity Arterial Revascularization Surgery: A Population-Based Comparative Effectiveness Study - D. Roberts</p>
11:00am 11:30am	<p>CSVS Invited Guest Lecture I - Okanagan 40 years of Carotid Surgery trials - how do they influence practice? Professor Alison Halliday, Oxford University <i>Learning Objectives - At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> 1. Understand that symptomatic carotid trials from the 1980-90s still inform current practice, despite advances in surgery and medicine 2. Learn that surgery (and maybe Stenting) for asymptomatic stenosis reduce both non-disabling and disabling/fatal stroke risk within 5 years of treatment, and this benefit is present for at least 15 years
11:30am 11:45am	Best CLI Update - Okanagan Dr. Ahmed Kayssi
12:00pm 1:30pm	CSVS Annual General Meeting (members only) - Vasseaux/Kootenay
12:00pm 1:30pm	Exhibits and Lunch (for those not attending AGM) - South Ballroom
12:00pm 1:30pm	Invited Guest Speaker and Residents/Fellows/Students informal meet and greet over lunch period - South Ballroom/Grand Foyer
1:30pm 2:45pm	<p>Paper Session III - PRACTICE MANAGEMENT - Okanagan Moderator: Dr. Greg Browne <i>Learning objectives- At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> 1. Gain knowledge into the status of Vascular Surgery as a specialty across Canada.

	<p><i>2. Gain knowledge into family physicians understanding of vascular disease.</i></p> <p>1:30-1:45 Future demands for vascular care: a census-based analysis - E Wooster 1:45-2:00 Medicolegal Claims in Vascular Surgery in Canada from 2009-2018 - S. Mostowy 2:00-2:15 Discrepancies in Research Productivity Among Canadian Surgical Specialties - L. Dubois 2:15-2:30 The physical toll of working in operating rooms: A survey of the Canadian Society of Vascular Surgery - G. Sarwal 2:30-2:45 Incidence of diagnostic error in peripheral vascular disease among primary care physicians - M. Metias</p>
2:45pm 3:15pm	Refreshment Break and Exhibits - South Ballroom
3:15pm 4:15pm	<p>VSEP Jeopardy - Okanagan Moderator: <i>Dr. George Oreopoulos</i> Learning objective: <i>Upon completion of this session, participants will be able to elucidate their strengths and weaknesses in knowledge of a variety of vascular topics.</i></p>
4:15pm 5:00pm	<p>Rapid 3 minute Poster Presentations: A brief introduction - Okanagan Moderator: <i>Dr. Kent MacKenzie</i> Learning objectives: <i>Upon completion of this session, attendees will be able to:</i></p> <ol style="list-style-type: none"> 1. Describe issues related to and affecting Vascular Surgery 2. Understand advances in various topics in Vascular Surgery <ol style="list-style-type: none"> 1. Population-based long-term outcomes of open versus endovascular aortic repair of ruptured abdominal aortic aneurysms - K. Salata 2. A systematic review and meta-analysis of the long-term outcomes of endovascular versus open repair of abdominal aortic aneurysm - B. Li 3. Association Between Prosthetic Graft Infections and Postoperative Procedures After Aortic Repair: A Retrospective Cohort Study - M. Rockley 4. The Correlation of Regional Health Care Utilization and Rates of Amputation Due to Diabetes and Peripheral Arterial Disease - C. de Mestral 5. Platelet Function Analyzer - An Effective Tool in Predicting Aspirin Sensitivity in Patients with Peripheral Artery Disease - H. Khan 6. The Development and Validation of a Simulated Competency Assessment in Diabetic Wound Management - O. Selim 7. Do initial radiographic results of atherectomy predict requirement for reintervention? R. Parekh 8. Pharmacologic Leg Pain: An Unrecognized Cause of Claudication - Y. Hsiang 9. Autologous Stem Cell Treatment for CLI Patients with no Revascularization Options: An Update of the Hemostemix ACP-01 Trial with 4.5 Year Follow Up - J. Misskey 10. Risk Factors for Surgical Site Infection After Lower Extremity Arterial Revascularization Surgery: A Systematic Review and Meta-Analysis -D. Roberts 11. Pulsed and Heated Perfusion in a Human Cadaveric Model: A Reliable and Reproducible Devide for Improving Endovascular Skills - R. Chastant 12. Remote video-based assessment of open vascular skills - L. Gordon 13. The burden of Academic Spam -A. Behdinin 14. Malnutrition and Mortality in Frail and Non-Frail Older Adults Undergoing Interventions for Peripheral Arterial Disease - L. Drudi 15. Development and endovascular optical imaging of a porcine model of advanced atherosclerosis - P. McVeigh
5:00pm 6:00pm	<p>CSVs POSTER SESSION - Grand Foyer <i>Wine & Cheese amongst the posters</i></p>

5:30pm 6:30pm	CSVS Education Committee Meeting - Chilcotin
Free Evening	
Saturday, September 14 samedi le 14 septembre 2019	
7:00am	CSVS Registration Desk Opens -Ouverture du bureau d'inscription de la SCCV
7:00am 8:00am	CSVS Research Committee Meeting - Selkirk
7:00am 8:00am	Exhibits & Continental Breakfast - South Ballroom
8:00am 9:00am	<p>Paper Session IV - PRE-OPERATIVE MEDICINE: Okanagan Moderator: <i>Dr. Ted Rapanos</i> Learning objectives- <i>At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> <i>1. Explore other perioperative medicine in vascular surgery procedures.</i> <i>2. Gain a better understanding of the role of medical management in the treatment of vascular disease.</i> <p>8:00-8:15 Exploring the Utility of Brain Natriuretic Peptide Measurement in Vascular Surgery - B. Huang 8:15-8:30 Optimizing Preoperative Cardiac Risk Stratification for Aortic Surgery - C. Zavitz 8:30-8:45 Evaluating the Role of Preoperative Medicine Consults on Clinical Outcomes in Vascular Surgery Patients - A. Butt 8:45-9:00 A Shared Decision Making Approach to Prescribing ASA + Anticoagulant Management in Peripheral Artery Disease: The Role of a Vascular Profile - D. Wooster</p>
9:00am 10:15am	<p>Paper Session V - VENOUS DISEASE AND AV ACCESS - Okanagan Moderator: <i>Dr. Pat Casey</i> Learning objectives - <i>At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> <i>1. Learn about novel techniques for the treatment of deep venous insufficiency.</i> <i>2. Review the factors affecting AV access outcomes and durability.</i> <p>9:00-9:15 Endovenous deep vein valve creation for the treatment of chronic venous insufficiency - G. Yang 9:15-9:30 Comparison of Endovenous Interventions versus Stripping and Ligation for Varicose Veins Arising from the Popliteal Fossa - A. Fung 9:30-9:45 Radiographic and functional outcomes of vascular thoracic outlet decompressive surgery: Is there a benefit? - R. Parekh 9:45-10:00 Functional Durability of Hemodialysis Access - M. Rockley 10:00-10:15 Risk Factors and Outcomes of Revisions on Arteriovenous Hemodialysis Access - M. Rockley</p>
10:15am 10:45am	Refreshment Break & Exhibits South Ballroom

<p>10:45am 11:00am</p> <p>11:00am 11:15am</p> <p>11:15am 11:45am</p>	<p>RESEARCH SESSION - Okanagan <i>Moderator: Dr. L. Dubois</i></p> <p>EVAR Graft Explant Should not be Delayed until Symptoms or Rupture Occurs: A Canadian Multicenter Experience - <i>L. Dubois</i></p> <p>Presentation of 2019 Award Winners</p> <ul style="list-style-type: none"> • CSVS Young Investigator Research Award (presented by Dr. Luc Dubois) • Gore Research Award (presented by Dr. Luc Dubois) • John L. Provan Education Award (presented by Dr. George Oreopoulos) <p>2018 Cook, Gore, Provan, Bayer Resident Research Award winners project updates</p> <p>CSVS 2019 BAYER RESIDENT RESEARCH AWARD - Rapid Fire Presentations <i>- 3 Finalists to present to judging panel</i></p> <ul style="list-style-type: none"> • Active Limb Warming during Endovascular Therapy for Peripheral Vascular Disease - M. Rockley • Development of an infrared imaging catheter for guidance of complex endovascular interventions - P. McVeigh • Cost Effectiveness Analysis of Endovascular Aortic Aneurysm Repair as an Outpatient Surgical Procedure - A. Naiem
<p>11:45am 12:15pm</p>	<p>CSVS Invited Guest Lecture II - Okanagan Does carotid surgery prevent dementia? Professor Alison Halliday, Oxford University</p> <p><i>Learning Objectives - At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> 1. Understand that although long term stroke risk is reduced by carotid surgery, dementia risk is unchanged 15-25 years later 2. Learn that dementia risk (and stroke risk) is higher in carotid stenosis patients with prior symptoms/brain infarction and diabetes - stroke risk can be reduced by CEA in these groups
<p>12:15pm 1:30pm</p>	<p>Lunch</p>
<p>1:30pm 2:15pm</p>	<p>Presidential Address – Dr. April Boyd Introduction by: Dr. Keith Baxter</p>
<p>2:15pm 3:15pm</p>	<p>Paper Session VI - PAD II - Okanagan <i>Moderator: Dr. Paul Cantle</i></p> <p><i>Learning objectives - At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> 1. Gain further understanding about the outpatient treatment of patients with critical limb ischemia 2. Gain knowledge into the steps required to create a limb preservation clinic in Canada.

	<p>2:15-2:30 The Coagulation Cascade Profile of Peripheral Arterial Disease Patients: Initial Steps to Personalized Medicine - M. Syed</p> <p>2:30-2:45 Characteristics of High Cost Inpatients with Peripheral Arterial Disease - M. Rockley</p> <p>2:45-3:00 Home Care Nursing After Elective Vascular Surgery: An Opportunity to Reduce Emergency Department Visits and Hospital Readmission - C. de Mestral</p> <p>3:00-3:15 Development and Initial Evaluation of a Canadian, University-Affiliated, Multidisciplinary Limb-Preservation Clinic - D. Roberts</p>
<p>3:15pm 3:45pm</p>	<p>Refreshment Break & Exhibits - <i>South Ballroom</i></p>
<p>3:45pm 5:15pm</p>	<p>Paper Session VII - THE ABDOMINAL AORTA - <i>Okanagan</i> Moderator: <i>Dr. Kirk Lawlor</i> <i>Learning objectives - At the end of this session, participants will be able to:</i></p> <ol style="list-style-type: none"> <i>1. Review and assess the access options for endovascular treatment of abdominal aortic aneurysms.</i> <i>2. Gather further knowledge into the basic science underlying abdominal aortic aneurysms.</i> <i>3. Discover novel treatment options for endoleaks after endovascular aortic aneurysm repair.</i> <p>3:45-4:00 Combined neuraxial and general anaesthesia significantly improves peri-operative outcomes following elective open abdominal aortic aneurysm repair - K. Salata</p> <p>4:00-4:15 Safety and Effectiveness of Single Proglide Vascular Access in Patients Undergoing Endovascular Aneurysm Repair (EVAR) - S. Jessula</p> <p>4:15-4:30 ONYX is More Effective than Coil Embolization for the Treatment of Type II Endoleaks - O. Scallan</p> <p>4:30-4:45 The relationship between macrophages, MMP-12, IL-6, and intraluminal thrombus in human abdominal aortic aneurysms - L. Bath</p> <p>4:45-5:00 Systematic review and meta-analysis of preventative strategies for acute kidney injury in patients undergoing elective abdominal aortic aneurysm repair - M. Fernandes</p> <p>5:00-5:15 Effective post-EVAR surveillance and management of graft complications amongst rural inhabitants in Manitoba - M. Cwinn</p>
<p>5:15pm</p>	<p>Meeting Adjournment</p>
<p>4:00pm 6:00pm</p>	<p>Exhibits Dismantling</p>
<p>6:30pm</p>	<p>*CSVS 2019 Annual Dinner - <i>Mission Hill Winery</i> <i>*Advance registration and dinner ticket required. Coach transportation provided to and from venue.</i></p>

The CSVS gratefully acknowledges the support of our 2019 scientific program by educational grants from:



Edwards

