EXECUTIVE COMMITTEE

2015-2016

President
Louis P. Perrault

President Elect
Vivek Rao

Past President
David Ross

Secretary-Treasurer
Ansar Hassan

Scientific Program Chair
Andre Lamy

Fellow’s Representative
Holly Mewhort

Specialty Committee Representative
Mackenzie Quantz

Examination Committee Chair
Marc Pelletier

Regional Representatives
Jean-François Légaré, Atlantic
Michael Moon, Sask, MB, AB
John Bozinovski, BC

CANCARE Representative
Rakesh Arora

Contact us at
(877/613) 569-3407 ext.417
222 Queen Street, suite 1403, Ottawa,
Ontario, K1P 5V9
CSCS@ccs.ca
Dear CSCS members and colleagues,

As fall is upon us, I hope you have enjoyed the summer season (the warmest and driest in recorded history in Montreal…) and wish all 238 members of CSCS (126 surgeons/physicians and 112 members in training) a dynamite back to work. This is already my last presidential message and the last two years have sure gone by in a flash!

CSCS Board:
The CSCS has modified its governance structure and increased transparency with open call for candidates and elections. The following members have been renewed for an additional two year terms until 2018; Secretary-Treasurer Ansar Hassan; Scientific Program Chair André Lamy; Resident Representative Holly Mewhort; Workforce Committee Chair Maral Ouzounian and Mac Quantz. Regional Representatives Michael Moon, John Bozinovski, and Jean-François Légaré. We were joined in 2015 by Fraser Rubens and Denis Bouchard. I must again thank each of the board members for their time and engagement in the course of busy clinical practices! I cannot overlook the tremendous support from CCS through Lauren Mann and Linda Palmer over the years.

As my terms comes to an end, I believe we Canadian cardiac surgeons must, more than ever, stick together and support and develop our national database, workforce, and research initiatives that will help shape the future of our specialty. We have unique opportunities for those in Canada and we should take advantage of them.

It has been my honor and a privilege to serve as the President of the CSCS for the past 2 years and to interact with a select group of talented driven individuals. The CSCS is in good hands with Vivek Rao, the upcoming CSCS President, and Jean-François Légaré, President Elect for 2018.

We hope you can join us for CCC in Montreal from Oct 22 to 25! This is YOUR annual meeting, the best of chances for networking and catching up!

See you there!

Louis P. Perrault
CSCS President 2014-2016
2015-2016 Highlights

CSCS has worked on improving value for its members and reaching out to both surgeons and trainees to best represent the voice of cardiac surgery in Canada as we head to challenging times.

- Our educational process is going through a major overhaul with the transition to Competency By Design (CBD) process initiated by the Royal College. Our specialty committee members are engaged and involved to preserve our interests. We continue to push for greater access to catheter skill learning and percutaneous techniques.
- Our industry sponsorship program has taken off in the last year and we will push ahead to increase it within the ethical guidelines. Industry is an essential partner as we seek to develop and evaluate new technology for the benefits of our patients.
- Our workforce committee is active with surveys, article writing and participation in symposia at national meetings. All should respond when queried to aid in predicting the needs for cardiac surgical manpower in the years to come.
- The “early” Spring Meeting chaired by Denis Bouchard was held in Montreal in March 2016 in conjunction with the TRP Trainee Review program led by Frederic Jacques. The board will continue reflecting on the future and format of the Spring Meeting. There is an opening to hold it with the Quebec annual meeting in June 2017. To be continued...
- The second trainee boot camp chaired by Fraser Rubens was held in Ottawa in July with, yet again, resounding success and the organizers should be commended for their initiative. Look for them to call upon you for faculty involvement in the future editions.
- Trainee involvement in our organization is paramount and the Trainee Committee continues its work led by Holly Mewhort.
- Surgeon members of the Society received a silk tie with the Logo of the CSCS upon the renewal of their dues. Wear our colors proudly around the world!

2016 Canadian Cardiovascular Congress (CCC) meeting.
- Scientific chair André Lamy has put together a strong program for CCC 2016 which again has undergone format changes. Because of blackouts, the AGM will now be held on Sunday afternoon following scientific sessions and immediately preceding the CSCS dinner, all should make sure to attend. Our Bigelow lecturer this year is Dr. Salim Yusuf, a pro-surgery cardiologist from Hamilton who has put together large scale randomized trials. Presentation of the Paul Cartier Cardiac Surgery Resident Award will immediately precede the Bigelow lecture on Monday morning October 24th.
- The CANCARE Society, who aims to advance the care of critically-ill cardiovascular patients using multidisciplinary expertise in a cooperative model, will be holding ECMO DAY on Friday October 21st at the Montreal Heart Institute immediately preceding the CCC. Make plans to arrive early for an update on a growing field in our practices. We also encourage all CSCS members to become CANCARE members for a nominal fee.
Nevertheless, the annual CSCS meeting will be busy again this year. We will start Saturday October 22th at 14:00 with an excellent oral session on CABG and Atrial Fibrillation. Following that, we will have our very popular video session at 16:00 (with a wine, cheese and other snacks). You are free after that but do not party too hard as you have to be ready for the next morning at 8 am!

Sunday morning is our usual Postgraduate program with experts in their field. The postgraduate program will be held at the Westin hotel across the street. We are then going back for Cardiac Surgery at Large oral session at 14:00. You have time to visit the exhibits but be back at 16:30 for the new session “Big papers, new guidelines?” The session is a first at the CCC where trials already presented or published will be presented again. We have selected 4 specific trials that will have an impact on our practice. It is up to you to decide if our cardiac surgery practices need to change!

We are going back to Westin hotel for the last two events of the day. The Annual General Meeting to be held at 18:30 and we will wrap up this busy day with the CSCS Annual Dinner (registration are required as seating is limited). Dr. Salim Yusuf (Population Health Research Institute, Hamilton) will be the guest speaker.

Monday morning opens with an oral session on aortic valve surgery, followed at 9:45 with the Paul Cartier Award and the presentation of the Bigelow Lecture by Dr. Salim Yusuf. Dr. Yusuf is a fantastic speaker and a world acclaimed scientist. His talk is titled;” A Cardiologist’s Perspective of Trials of Cardiac Interventions and Surgery”

An exciting workshop will be held right after the Bigelow Lecture: “Competency by Design: the Next Generation”.

I am looking forward to see you all in Montreal.

Andre Lamy
EXAMINATION BOARD REPORT

For the 2016 Examination in Cardiac Surgery, 19 candidates completed the exam, including 5 Canadian trained medical school and residency (CMDPG) candidates. The examination was divided into an SAQ component that was comprised of 2 papers, each allocated 3 hours of exam time, and an oral question component consisting of 2 sessions of 90 minutes each. The total length of the exam is 9 hours. The format of the exam has been consistent for over 10 years. For the oral exam, each candidate attended 2 sessions, rotating through 4 rooms, each with a different examiner. Each candidate was therefore assessed by 8 different examiners during the oral exam, which is felt to improve the exam’s validity. The length of each station was increased to 22 minutes, in order to address some of the candidates’ previous concerns about length of time. The overall pass rate over the past 3 years has been 76.3% for all candidates, and 81.3% for CMDPG candidates. There are 2 processes employed by the Royal College to ensure the exam is reliable and fair.

The first process is that of a post-examination survey (PES), administered anonymously to all candidates at the end of their exam. The PES report is an extensive 19-page document. Key findings included:

- 86% felt the information posted about the exam was clear.
- 87% felt the technical quality of the visual material was acceptable on the oral exam.
- 73% (up from 14%) felt there was enough time allotted for the oral exam questions.
- 40% felt the content tested on the oral exam is not relevant for clinical practice.
- 50% felt that the written exam was not useful to assess clinical competence.

The last two points are obvious sources of concern, but are actually consistent, and in fact better, than some previous surveys. Particular attention was paid this year to reviewing all poorly scored questions, with consensus among all members of the exam board that the items tested are in fact important to newly practicing cardiac surgeons. The fact that >80% of written questions are new may play a role in this evaluation.

The second process is that of a Psychometric Examination Report (PER), in which questions are tested for their structure and outcomes. This report focuses on the final results, broken down by individuals and exam component. An item analysis report revealed that 2 questions
had too much variability, and were therefore discarded. We again observed significant fluctuation on the marks for the written exam. While the top marks continue to be consistent from year to year, we have observed some very low scores, more than 2 standard deviations down from the mean. We are not sure of the cause for this, but it is a concern of the examination board. The lowest scoring areas continue to be in congenital, pacemakers/ICD and heart failure surgery.

The cardiac surgery exam has usually been rated quite favorably, but over the years, candidates have expressed concern with the written component. Developing new questions can be challenging, but must be done because questions that are repeated almost always score higher in subsequent years. This forces the exam board to write as many new questions as possible, and we do our best to ensure they are clinically relevant. Also, the amount of material currently available in the form of published guidelines has increased drastically in the past 10 years, adding to the amount of material that needs to be covered. However, we continue to see very high marks on the written exam, suggesting that for candidates who are knowledgeable and well prepared, it is a fair exam. We are grateful to Drs. Imtiaz Ali, R.J. Cusimano and Kapil Sharma, who have finished their terms with the exam committee this past year. This year, we welcome two new members to the examination committee: Dr. Bindu Bittira (ON) and Dr. Ismail El-Hamamsy (PQ).

Marc Pelletier, Chair, Cardiac Surgery Examination Committee

---

**CSCS Endorsement of Cardiac Surgery Quality Indicators Meeting**

The Canadian Society of Cardiac Surgeons (CSCS) is proud of its work with the Canadian Cardiovascular Society (CCS), and the Canadian Institute of Health Information (CIHI), to engage Canadian cardiac surgeons in a national dialogue on the quality of cardiac surgical care across Canada. To this end, CSCS is endorsing a cardiac surgery quality indicators meeting entitled “*Using data to drive improvements in cardiac surgery*” which is being held during the Canadian Cardiovascular Congress on Saturday, October 22nd, 2016. This meeting, led by Drs. and Ansar Hassan and Jim Abel, will share comparative quality indicator results and facilitate discussion regarding the value and use of national cardiac surgery quality indicators, demonstrate the process of data flow and risk adjustment for the national cardiac surgery quality indicators; and discuss future actions to accelerate quality improvement in cardiac surgery.
The year has been focused on Competency by Design.

Cardiac Surgery was chosen as one of the midterm groups to begin the transition.

The first workshop was held in Ottawa over three days in March. This was an introduction to the concepts behind CBD and to initiate defining our Entrustable Professional Activities (EPAs) and the milestones that are contained within them. Good progress was made we will be meeting again in late 2016.

CBD has some interesting aspects to it and are worth bringing to your attention:

- Our traditional time based training program is being replaced by a competency based program where trainees are able to perform EPAs and their milestones with adequate ability. While possible to complete the program in less than six years the main purpose of CBD is to provide frequent evaluation by multiple consultants in real time as opposed to the end of the rotation. Constant feedback to the trainee should help to identify strengths that can be built upon and weaknesses that can be improved upon. The goal is to provide feedback that is more timely and accurate.

- The method and frequency of evaluation is not yet defined. This will be the focus of one of the upcoming meetings in Ottawa. The evaluation sheet will not be time consuming and will be standardized across all programs. It is anticipated that the trainee would be responsible for ensuring he evaluation is completed. Electronic forms are anticipated.

- We need to be wary of “evaluator burnout”. Due to an increasing number of evaluations it is anticipated that all academic members of a division will actively participate.

- Data storage. This data needs to be stored and collated. The Royal College has offered to do this however not all Universities agree to data leaving their institution. This is very problematic as the infrastructure to store this information in a secure manner is both expensive and time consuming.
• Fewer off-service rotations. As the Committee began to develop the EPAs and milestones we realized that many competencies that were previously part of off-service rotations could be obtained on cardiac surgery. Some of this is due to the evolving practice of cardiac surgery with an expanding number of procedures using thoracic access.

• Transition to Practice. The roles of Junior, Senior and Chief have been redefined in CBD

• Transition to Discipline, Foundations of Discipline and Core of Discipline will be similar to our current training plan. The interesting, and very controversial, item is the Transition to Practice. For cardiac surgery, the exams will be held in December prior to completion of the program. The last six months of training is meant to be a time where the trainee begins to perform cases independently without the consultant present. This is no more than conceptual at this point but was the focus of much discussion. Obviously there needs to be support from our group, the hospitals, provincial governing bodies, CMPA and most importantly, the patients themselves.

Trainee Review Program (TRP)

TRP was held this year in conjunction with the Spring Meeting.

The program continues to receive excellent reviews by the trainees and many feel that it contributed to a positive outcome on the exams. The content continues to be a combination of interactive didactic lectures combined with oral exams. The content remains contemporary and all members of TRP are to be congratulated for making this program a success.

Canadian Junior Cardiovascular Week

The second Canadian Junior Cardiovascular week was held in Ottawa with fourteen attendees. Trainees came from Nova Scotia to Alberta. The curriculum is a combination of didactic lectures and skills acquisition through simulation. Very well received by all and we look forward to next year. Thank you, Dr. Fraser, for a job well done.

Mackenzie Quantz
As the CSCS Resident Representative it continues to be my goal is to strengthen our sense of community, particularly amongst our trainees, in order to foster career development and success. Two growing online communities now offer CSCS members a variety of networking opportunities. The CSCS member wide online community offers all members a convenient way to collaborate with colleagues across the country on a variety of career related issues, including educational approaches, research interests, job opportunities, and more. The CSCS cardiac surgery trainee online community, offered exclusively to members-in-training, provides a space to openly share educational resources, experiences and opportunities with other trainees. If you are a CSCS member and want to access any of these great resources please join the Online Community! Email invitations will be sent from TimedRight during the meeting.

Congratulations to all out CSCS members-in-training who successfully completed their Royal College Exams this past year! With many of our members now starting as staff the CSCS Members-In-Training committee is looking for new members to continue to grow the online communities and build resources for our current and future trainees. If you are a medical student, resident or fellow and are interested in getting involved in the CSCS community please send us an email (cscs.mitcommittee@gmail.com).

2015 Dr. Paul Cartier Cardiac Surgery Resident Award goes to Dr. Holly E.M. Mewhort

This award was created in honour of Dr. Paul Cartier, who was highly regarded as an outstanding Canadian Cardiac Surgeon. It is annually given to a Cardiac Surgery Resident who has made an outstanding contribution to the field of cardiac surgery through basic science or clinical research.

From left to right: Dr. Andre Lamy, Dr. David Taggart, and Dr. Holly Mewhort
The 2\textsuperscript{nd} Annual Junior Cardiovascular Surgery Week

The second annual Junior Cardiovascular Surgery week was held in Ottawa from July 18\textsuperscript{th} to the 22\textsuperscript{nd} at the University of Ottawa Skills and Simulation Centre. Twelve candidates from across Canada attended the bootcamp. Most trainees were in first year however several second year residents also attended. Apart from local faculty from Ottawa, again this year we had contributions from Dr. Mac Quantz from Western and Dr. John Lee from McMaster University.

The structure of the course followed the successful design of the previous year. Mornings were filled with didactic reviews of pertinent topics such as anticoagulation for the cardiac surgeon, arrhythmia management, a primer of angiogram review and pathophysiology of cardiopulmonary bypass. Afternoons were occupied with simulation training including topics such as vascular anastomoses and cannulation. Mac provided a superb box model for aortic cannulation with which the candidates practiced on a daily basis. A full afternoon was devoted to hands-on cadaver dissection to review the anatomy of arm and leg vessels, the mediastinum and the axillary artery. Residents also underwent a full morning learning the basics of communicating bad news to patients and families followed by intensive training with professional actors in the Breaking Bad News scenarios.

John Lee again graciously hosted a resident evening to share his perspectives on maintaining work-life balance in their upcoming careers. The residents also enjoyed a TED dinner evening at my home, hearing non-medical experts on innovation, leadership and accountability. The week culminated with the opportunity for each trainee to cannulate a porcine beating heart with full cardiopulmonary bypass simulation.

Fraser Rubens
The course was very well-reviewed by all attendees and it provided this group, as with last year, the opportunity to form connections with their national colleagues which we anticipate will be maintained throughout their careers. We would like to thank our industrial partners who provided financial assistance with the bootcamp this past year including Edwards, Johnson and Johnson, Medtronics, St. Jude and Gore. Many thanks as well to partners who contributed products including valves, suture material and vascular grafts for the simulation labs.

Plans are already underway for next years’ bootcamp to be held in Ottawa in July. We reached out to open the door for the idea of rotating to another centre, however the majority at the CSCS felt that for the coming year, the recipe seems to work in Ottawa and it is centrally-located. However, if other teams want to consider taking this on in the future, the leadership of the CSCS would be open to their efforts.

There was also agreement that there must be a mandatory rotating contribution from other program directors to the teaching efforts. We will confirm the dates of next years’ event at the time of the Specialty Committee meeting at the CCC in Montreal in October at which time we will be asking for a minimum of 2 members of the committee to commit to come to Ottawa next summer. Faculty will be reimbursed for their expenses.

We are currently in negotiations with the Simulation Centre to book the event for next July and we hope that we will have 100% participation from all of the programs across Canada. The CSCS will be taking over full responsibility to negotiate with industry going forward in order to provide a stable level of funding going forward.

Finally, many thanks to the tremendous team at the Eric Poulin Surgical Office of Education (Christine Seabrook, Laura Gerridzen and Kathryn Condon), without whom this event could never succeed.
The Canadian Cardiovascular Critical Care (CANCARE) Society, in conjunction with the Montreal Heart Institute, is pleased to announce our first annual ECMO Day Workshop.

ECMO Day is a 1-day interdisciplinary workshop to be held on Friday Oct. 21, 2016 at the Montreal Heart Institute just prior to the Canadian Cardiovascular Congress. This workshop will facilitate multidisciplinary discussions between Perfusion, Nursing, Anaesthesiologists, Cardiovascular Surgeons, Intensivists, Emergency Physicians, and Cardiologists involved in ECMO to exchange on State-of-the-Art use of ECMO and collaborate on protocol development and data acquisition in Canada.

Other Educational Activities include;

- Special Edition of the CJC
- Society Website and Social Media
- CANCARE Society Investigator Group (CSIG)
- National and International Collaborations
- Canadian ECMO Interest Group

### Clinicians Work to Strengthen CIHI’s Cardiac Quality Report

The Canadian Institute for Health Information (CIHI) has updated the content of their annual Cardiac Care Quality Indicator (CCQI) report to better align with the indicators developed through the CCS Quality Project. The CCQI report was released to designated users at health care facilities in February, and reported on the following indicators:

- 30-day in-hospital mortality after PCI
- 30-day in-hospital mortality after CABG
- 30-day in-hospital mortality after CABG and AVR *Modified
- 30-day in-hospital mortality after AVR *Modified
- 30-day readmission rate after PCI *New
- 30-day readmission rate after CABG *New
- 30-day readmission rate after heart failure *New
- PCI volume by center *New
- TAVI volume by province *New

The CCS is working to further strengthen this collaboration by consulting on the selection of indicators, interpretation of results and knowledge translation strategy for future reports.
We are pleased to announce that the CSCS will be hosting a key symposium at CCC 2016 to immediately following the Bigelow lecture. Cardiac Surgery is currently in the development phase of the Competency by Design (CBC) curriculum, which will be applied to the first cohort of trainees July 2018. The coming 2 year period encompasses one of the most critical phases in the history of Cardiac Surgery in Canada. In particular, there is a tremendous responsibility of the leadership to engage all stakeholders to ensure resounding success and we believe that this well-timed workshop will play a key role in identifying the concerns of the membership as we go forward and to give direction to the Specialty Committee on how to approach these priorities.

We will begin with an overview of the rationalization of the development of CBD as it relates to the urgent requirement to change to address the needs of the health care system. This will be followed by an interactive presentation designed to introduce members to the nature of milestones, EPAs and assessment techniques and expectations. The role of research and the academic enrichment year is on the table and we will explore this in an interactive format. We will include key topics on medico-legal issues of resident autonomy, informed consent as they relate to EPAs and the status of the Transition to Practice year. Finally, we will discuss the Transition out of Practice phase of a surgeon’s career and how the potential for mentorship can be carefully integrated into the CBD process.

We anticipate that this workshop will be highly relevant and timely to cardiac surgeons who practice in academic centers as well as community surgeons who have high stakes in the competency of graduates. CBD will change practice through improved quality and it will impact on cardiovascular care in Canada. Finally, we believe that this represents the best opportunity to achieve engagement across the country, as this will be critical to support this new era.

Objectives
1) Recognize the challenges that justify the implementation of Competency by Design in Cardiac Surgery training.
2) Categorize the key elements that constitute milestones and entrustable professional activities at the three training stages in Cardiac Surgery
3) Identify the training requirements and challenges in acquiring expertise to provide new technologies and innovations
4) Recognize the medico-legal perils and challenges of CBD as it relates to resident autonomy and the Transition to Practice
5) Distinguish the key elements that constitute successful implementation of simulation-based research and the principles of educational initiative innovation
6) Compare the key roles of Practicing surgeons and those entering the Transition out of Professional Practice
The Canadian Society of Cardiac Surgeons (CSCS) is proud to be a recognized Affiliate Organization of the Canadian Cardiovascular Society (CCS)

CSCS Membership

<table>
<thead>
<tr>
<th></th>
<th>Physicians</th>
<th>Members in training</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>134</td>
<td>69</td>
<td>203</td>
</tr>
<tr>
<td>2014</td>
<td>131</td>
<td>58</td>
<td>189</td>
</tr>
<tr>
<td>2015</td>
<td>129</td>
<td>51</td>
<td>180</td>
</tr>
<tr>
<td>2016</td>
<td>126</td>
<td>112</td>
<td>238</td>
</tr>
</tbody>
</table>

CJC Editors Top Picks
Be sure to check out Dr. Stanley Nattel’s, Editor-in-Chief of the Canadian Journal of Cardiology, top articles and must-reads published over the past year.

