Minutes - Centre for Advanced Computing Board Meeting

October 19, 2016, 1:00 – 3:30
Call-in Number: 1-866-827-6873   Code: 8030555#

Participants:
- o Don Aldridge, Executive Director, Centre for Advanced Computing (non-voting)
- o Wendell Brown (CAC Chair), Colebrook Consulting Inc. (phone)
- o Dr. Sylvain Charbonneau, University of Ottawa (guest - non-voting - phone)
- o Dr. Ken Edgecombe, CTO, Centre for Advanced Computing (guest – non-voting)
- o Dr. John Fisher, Queen's University (representing Steven Liss - phone)
- o Dr. Tofy Mussivand, Ottawa Heart Institute (phone)
- o Dr. Gary Slater, University of Ottawa (phone)
- o Ashley Wightman (recording secretary)

Regrets:
- o George Angus, Qualicum Ventures
- o Sandra Crocker, Carleton University
- o Dr. Florence Dzierszinski, Carleton University
- o Dr. Pat Heffernan, RMC
- o Dr. Steven Liss, Queen's University
- o Giulio Maffini, a+i2

1. **Welcome and review of the agenda.**
    - o Wendell opened the meeting at 1:09 PM.
    - o No changes were made to the agenda.

2. **Review minutes of the April 18, 2016 CAC Board meeting.**
    - o Don reminded the Board that in the previous meeting it was agreed to distribute, review, and approve the minutes electronically, in an effort to be able to post the minutes in a timely fashion. Going forward it was agreed that the minutes would be sent to the Board within one day of each meeting, and that corrections would be provided within one week (5 business days) of distribution, after which the "final" version would be redistributed as well as being posted on the CAC web site.

      Motion to approved by Wendell Brown, seconded by Tofy Mussivand. Unanimous approval.

3. **Financial update.**
    - o The budget overview (distributed prior to the meeting) was reviewed.
    - o The current plan is to invest some of the cumulative surplus now and in 2017 in order to build up capacity of the Centre. Some variance is anticipated, include energy usage and actual CFI MSI funds.
    - o The headcount for the two Ottawa based CAC staff members (one each at Carleton and uOttawa) will be centralized starting in fiscal 2017/18. If there is a desire to keep these individuals, then each school may elect to cover their salary and benefits.

4. **Director's update:** (discussion led by Don Aldridge)
   o Platform refresh RFP:
      – Following a formal RFP, IBM and Lenovo were awarded the business to provide storage and computational capacity respectively.
      – The systems are being financed with a 5-year full payout lease, with annual payments in advance. At the end of the term the equipment may be purchased for $1, or returned to IBM at their expense.
      – Currently moving towards a fully used "condo model" (a shared resources cluster approach).
      – The new equipment was delivered during the last week of June. This included approximately 3,000 Intel cores from Lenovo; 2 PB of IBM Elastic Storage; and, 2 IBM robotic tape systems (one for the CAC and an off-site system at the Queen's ITS site on campus).
      – The last SUN M9000 server was turned off on Sept 30, resulting in a significant decrease in the electrical usage for the centre.
      – The refresh also includes implementing a new file system (GPFS), a new scheduler (Slurm), and a hierarchal storage manager – migration to these new systems will be completed over the next few months.

   o "Cognitive Analytics Development Hub" – IBM Partnership
      – A "teaming agreement" has been signed with IBM providing the CAC with access to the entire family of Watson offerings for next five years.
      – The Hub will operate with its own Profit/Loss balance sheet, and is expected to be financially self-sufficient by the end of calendar year 2017.
      – CAC will be the first Canadian university to offer this level of Watson development support.
      – Staffing is anticipated to include:
         ¬ 1 full-time CAC hire – senior developer
         ¬ 2 post docs – to be provided by SOSCIP for 2 years at no cost to the CAC
         ¬ 1 post doc – funded by Stantive Technologies
         ¬ 4 sixteen-month interns via the Queen's University Internship Program (QUIP)
         ¬ 1 professor on sabbatical for a year starting July 1, 2017
         ¬ 0.5 HC for operations management (Dr. Ken Edgecombe)
         ¬ 0.2 HC secondment from IBM (Stephen Perelgut)

      John recommended that a 1-page summary sheet be developed for Board members in order to initiate discussions with others for funding opportunities. This will be created by Don.

   o Real estate expansion:
      – The current office space is too small for the existing team, and can't accommodate the addition of the Hub team.

- Office space across the hall (530 sq.ft.) is being rented effective Jan 1, 2017, providing room for 7 people.
- New office space (approximately 6,000 sq.ft.) within the JSM site is to be renovated, with an anticipated occupancy late 2017 or early 2018, at which time the entire CAC team will be consolidated in one office.

o Compute Canada / Compute Ontario updates:
  - Confidence in the management team of CC continues to eroded significantly.
  - Stage 2 site selection process ($20M in CFI funding), not yet finalized, was reviewed by KPMG and was deemed to be seriously flawed; regardless, the CC Board continues to support the CC management team. This may change as a new Board comes on board.
  - CO is protesting the CC Board's decision and is looking to restart the selection process.
  - As it currently stands the CAC is ineligible to compete for any of this funding since we opted to pass a year ago in support of a more focused CO proposal.
  - CFI has requested that CC create a Members' Working Group. Each region selected two people. Group has appointed Don as Chair.
  - At the Sept CC AGM four new academic members were added to the CC Board, including our own Steven Liss.

o MSI-2:
  - Funding from CFI for the 5 years starting April 1, 2017, is currently on hold – responsibility for meeting the terms of the award has been moved from CC to Western U.
  - CFI has announced the amount of funding that will go to the CC consortium – approximately 85% of the requested amount.
  - All CAC MSI funding will come directly to Queen's effective April 1, 2017, including funding for CAC staff currently imbedded at Carleton and uOttawa. As above, these positions will be moved to Kingston effective April 1, 2017.

o Outreach activities:
  - Queen's – ongoing meetings with most department heads across campus
  - RMC – Oct 13 and 20 information sessions
  - uOttawa – two sessions scheduled for Nov 30
  - Carleton – Dec 1st is being proposed - tbc

o Business development:
  - An opportunity tracking spreadsheet was sent to Board members on Oct 19.
  - Currently tracking approximately 60 opportunities – most are not revenue generating.
  - This initial draft will be updated and used to track opportunities from identification through to conclusion.

5. **Migrating from a "Management Board" to an "Advisory Council".**
   o Wendell led this discussion. The CAC strategy and transition from HPCVL to CAC over the last 18 months is perceived as going well.
   o Don expressed a desire for a more active role by the members in identifying the direction in which the CAC should move (emerging areas of focus and funding opportunities).
   o With the refocusing of the CAC, the Board's fiduciary role has effectively gone away, and an advisory role is more appropriate – this was discussed and agreed to.
   o Sylvain suggested that uOttawa might be able to provide three new Council members, one each from the faculties of Science, Engineering and Medicine. Don would be more than happy to see this level of involvement from each of the four university members of CAC.
   o Don and Wendell are working on a new draft constitution, to be sent to members for review before Christmas, with the hope that it be approved at the February meeting.
   o Looking to the future, Don suggested that the goal is to have governmental funding be a fraction of the overall budget within 5 years.
   o Don asked for a discussion on the location of future meetings, suggesting that an extended in-person planning session be held in Kingston next summer, and that the other two meetings each year be held via phone. This was agreed to.

6. **In-camera session.**
   o Not required.

7. **Next meeting** – February 1, 2017. 1:00 – 4:00 PM. Ashley to send a calendar invitation.

Frequently Used Acronyms

- ACEnet – The regional organization representing the Atlantic provinces within the Compute Canada federation
- ARC – Advanced Research Computing
- BrainCODE – [division of OBI] Brain-Centre for Ontario Data Exploration (Toronto, ON)
- CAC – Centre for Advanced Computing – The regional organization representing Ontario within the Compute Canada federation – formerly known as HPCVL (name changed on April 1, 2016)
- Calcul Quebec – The regional organization representing Quebec within the Compute Canada federation
- CANARIE – Canada's Advanced Research and Innovation Network – provider of the optical network connecting the provincial networks
- CC – Compute Canada – a member based organization with the members being the universities and research hospitals across Canada who elect to pay an annual membership fee – members are users of ARC and HPC.
- CEO – Chief Executive Officer
- CERU – Clinical Evaluation Research Unit (Kingston, ON)
- CFD – Computational Fluid Dynamics
- CFI – IF: Canada Foundation for Innovation – Innovation Fund
- CFI – IOF: Canada Foundation for Innovation – Infrastructure Operating Fund
- CFI – MSI: Canada Foundation for Innovation – Major Science Initiative
- CFI – NPF: Canada Foundation for Innovation – National Platform Fund
- CIHR – Canadian Institutes of Health Research
- CIMVHR – Canadian Institute for Military Veterans Health Research
- CIO – Chief Information Officer
- CO – Compute Ontario – includes SciNet, SharcNet, HPC4Health and CAC
- CPCSSN – Canadian Primary Care Sentinel Surveillance Network
- Cybera – An Alberta not-for-profit responsible for the provincial ORAN as well as innovations that are enabled by networks and computers
- DAC – Data, Analytics, and Computing
- ED – Executive Director
- EOI – Expression of Interest
- EVP – Executive Vice Principal
- FedDev Ontario – Federal Economic Development Agency for Southern Ontario
- fMRI – Functional Magnetic Resonance Imaging
- HPC – high performance computing
- HPCS – High Performance Computing Symposium (annual)
- HPCVL – High Performance Computing Virtual Laboratory (renamed CAC on April 1, 2016)
- HPC4Health – a computing consortium consisting of UHN and the Hospital for Sick Children
- HPRC Ontario – High Performance Research Computing Ontario
- IC – Industry Canada (now ISED – Innovation, Science and Economic Development)
- ICES – Institute for Clinical Evaluative Sciences
- IESO – Independent Electricity Systems Operator (Ontario)
- Indoc Research – a bioinformatics not-for-profit company (Toronto, ON)
- ISED – Innovation, Science and Economic Development Canada (formerly Industry Canada)
- LOS – Letter of Support
- LP1 – a large parallel computer to be installed at SciNet in 2017.
- LSO – Life Sciences Ontario
- M9K – Sun M9000 computer
- MEDI – Ministry of Economic Development & Innovation (Ontario)

- MRI – Ministry of Research and Innovation (Ontario)
- MRI – Magnetic Resonance Imaging
- MSI – Major Science Infrastructure – a funding program run by CFI to provide operating funding for large science projects (including high performance computing)
- NCE – Network of Centres of Excellence
- NOI – Notice of Intent
- NRC – National Research Council
- NSERC – MFA: Natural Sciences & Engineering Research Council of Canada – Major Facilities Access
- NSERC – MRS: Natural Sciences & Engineering Research Council of Canada – Major Resources Support
- OBI – Ontario Brain Institute
- OCBN – Ontario Cancer Biomarker Network (Toronto, ON) *now merged into Indoc Research
- OCE – Ontario Centres of Excellence
- OCI – Ontario Cancer Institute
- OIT – Ontario Innovation Trust (defunct)
- ORDCF – Ontario Research & Development Challenge Fund (defunct)
- ORF – RE: Ontario Research Fund - Research Excellence
- ORF – RI: Ontario Research Fund - Research Infrastructure
- ORION – Ontario Research and Innovation Optical Network
- OVPR – Office of the Vice-Principal Research
- Parteq Innovations – The Queen's commercialization organization (Kingston, ON)
- PHI – Personal Health information
- POP – Point of Presence – a connection point to the optical network
- QUIP – Queen's University Internship Program
- REB – Research Ethics Board
- RISQ – Réseau d'informations scientifiques du Québec
- RMC – Royal Military College of Canada
- SAC – Scientific Advisory Committee
- SC: Super Computing conference (annually in the US)
- SciNet – a U of Toronto based computing centre
- SHARCnet
- Sick Kids – The Hospital for Sick Children (Toronto, ON)
- SNOLAB – Sudbury Neutrino Observatory Lab (Sudbury and Kingston, ON)
- SOSCIP – Southern Ontario Smart Computing Innovation Platform
- SSHRC – Social Sciences and Humanities Research Council
- UHN – University Health Network (Toronto)
- WestGrid – The regional organization representing the Western provinces (Manitoba and west) within the Compute Canada federation.