



**Okanagan Senate**

**THE FOURTH REGULAR MEETING OF THE OKANAGAN SENATE  
 FOR THE 2012/2013 ACADEMIC YEAR**

WEDNESDAY, DECEMBER 19, 2012

3:30 P.M. to 5:30 P.M.

ASC 130| OKANAGAN CAMPUS

- 1. Senate Membership – Mr Christopher Eaton** (information)  
 New Senator  
 Dr Barbara Marcolin, Assistant Professor of Management, Faculty Representative for the Faculty of Management (replacing Dr Gurupdesh Pandher)
- 2. Minutes of the Meeting of 20 November 2012 – Prof. Deborah Buszard** (approval)  
 (Master Pages 3-13)
- 3. Business Arising from the Minutes**
- 4. President’s Remarks – Prof. Stephen J. Toope** (information) (master pages 14-26)  
 Record of President’s Activities for 27 August 2012 to 9 November 2012
- 5. Deputy Vice-Chancellor’s Remarks – Prof. Deborah Buszard** (information)
- 6. Admission & Awards Committee – Dr Spiro Yannacopoulos** (approval)
  - a. Changes to Admission for Canadian Aboriginal Students** (master pages 27-31)
  - b. New Policy O-52: Admission for Secondary School Applications following the BC / Yukon Curriculum and Discontinuation of Policy J-52** (master pages 32-45)
  - c. New and Revised Awards** (master pages 45-46)
  - d. Major Entrance Scholarships** (master pages 47-49)
- 7. Curriculum Committee – Dr Dwayne Tannant** (approval) (master pages 50-70)  
 December Curriculum Report
- 8. Learning & Research Committee – Dr Peter Arthur** (approval) (master pages 71-72)  
 Candidates for Emeritus Status
- 9. Nominating Committee – Mr Curtis Tse** (approval) (master page 73)  
 Appointment to Senate Curriculum Committee

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**10. Report from the Provost – Dr W. Wesley Pue** (information) (master pages 74-100)

Centre for Heart, Lung, and Vascular Health

**11. Other Business**

Regrets: Kristen Elder, telephone 604.822.5239 or e-mail: [kristen.elder@ubc.ca](mailto:kristen.elder@ubc.ca)

*UBC Senates and Council of Senate website: <http://www.senate.ubc.ca>*



## Okanagan Senate

### Minutes of 20 November 2012

**DRAFT**

#### Attendance

Present:	Prof. D. Buszard (Vice-Chair), Mr J. Ridge (Secretary), Dr P. Arthur, Ms S. Baez, Dr P. Balcaen, Dr G. Binsted, Dr L. Bosetti, Dr E. A. Broome, Mr S. Bullock, Ms M. Burton, Dr K. Carlaw, Dr J. Cioe, Mr I. Cull, Dr F. de Scally, Dr R. R. Dods, Dr M. Grant, Ms F. Helfand, Dr K. Hewage, Dr S. Hilton, Dr J. Johnson, Mr T. Krupa, Mr C. Li, Dr Y. Lucet, Dr C. Mathieson, Dr W. Pue, Mr M. Redekopp, Dr D. Roberts, Dr C. Robinson, Mr R. Sharma, Mr T. Smith, Dr R. Sugden, Dr D. Tannant, Dr W. Tettey, Mr C. Tse, Dr P. van Donkelaar, Dr G. Wetterstrand, Dr S. Yannacopoulos
Regrets:	Mr R. Adl, Dr L. Allan, Mr K. Aziz, Mr J. Al Ramahi, Mr J. Baxter, Ms M. Campos, Mr C. Gorman, Dr E. Hall, Dr C. Labun, Ms J. Lawson, Dr A. Milani, Ms S. Morgan-Silvester, Dr B. Nilson, Mr K. Nolan, Ms L. Patterson, Dr A. Phillion, Dr C. Scarff
Via Videoconference:	Prof. S.J. Toope (President)
Guests:	Ms K. Darling, Mr L. Mueller, Dr E. Taylor, unnamed reporter from the Phoenix.
Recording Secretary:	Mr C. Eaton

#### Call to Order

The Vice-Chair called the third regular meeting of the Senate for the 2012/2013 Academic Year to order.

#### Senate Membership

##### ELECTION OF NEW STUDENT REPRESENTATIVE

Jan Cioe	}	<i>That Mr Tim Krupa be elected as a Student Representative at Large (replacing Ms Janet Lawson) until 31 March 2013 and thereafter until replaced.</i>
Curtis Tse		

Approved.

#### NEW SENATORS

The Registrar welcomed to Senate Dean Roger Sugden, Dean of the Faculty of Management, and Dr Yves Lucet, Faculty Representative for the Faculty of Arts and Sciences.



In response to a question from Senator Robinson, the President advised that the School of Nursing was not involved in the Centre at this time, but he saw no reason why it could not be.

### **Deputy Vice-Chancellor's Remarks**

Professor Buszard noted that she recently was in Ottawa to meet with the granting councils, our local MPs, and various departments to raise awareness of our research and scholarly activities at UBC's Okanagan campus and to remind them of our impact on the local community. She further mentioned that Dean Grant had joined her to meet with the President of the Social Sciences and Humanities Research Council.

The Deputy Vice-Chancellor noted that since the last Senate meeting, the Fipke Laboratory spaces, the Library expansion, and the Richard S. Hallisey atrium in the Engineering, Management & Education building were officially opened. Professor Buszard applauded the efforts of the development office for passing the \$65 million mark for the fundraising campaign noting that a broad and robust plan was under way for further fundraising.

Senator Cioe asked if there was a model adopted for next year's funding allocations.

At the request of the Vice-Chair, the Provost advised that a historical model was currently in use and would be again for next year; however, there is a longer-term desire to create a more transparent budget model for the year after next.

In response to a follow-up question from Senator Dods, Dr Pue replied that government funding was fairly well known: we would either get a stable budget or a small cut. The primary budget concern is inflation in costs.

### **Candidates for Degrees**

Jan Cioe  
Dwayne Tannant

} *That the candidates for degrees, as recommended by the faculties and the College of Graduate Studies, be granted the degrees for which there were recommended, effective November 2012, and that a committee composed of the Registrar, the appropriate dean(s) or their appointed designates, and the Chair of the Okanagan Senate, be empowered to make any necessary adjustments. (2/3 majority required)*

Approved.

### **Joint Report of the Admission & Awards and Curriculum Committees**

The Committee Chairs, Dr Spiro Yannacopoulos and Dr Dwayne Tannant presented.

**BACHELOR OF SOCIAL WORK (B.S.W.) PROGRAM – SUSPENSION OF ADMISSION AND PROGRAM DISCONTINUATION**

Spiro Yannacopoulos Dwayne Tannant	}	<i>That Senate approve the Bachelor of Social Work (B.S.W.) Suspension of Admission admissions proposal effective for the 2012 Winter Session; And the Bachelor of Social Work (B.S.W.) Program Discontinuation curriculum proposal effective for the 2014 Winter Session.</i>
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Dr Yannacopoulos explained to Senate the nature of Social Work’s proposal and the process by which his and Dr Tannant’s Committees had considered the request.

Dean Binsted explained that this was an opportunity for the Faculty to focus on what it could do best and become a leader in social work education in BC while broadening the attraction of UBC Okanagan’s programming.

With permission of the Chair, Dr Edward Taylor, Director of School of Social work, explained that Social Work is becoming more specialized as a discipline and graduate study the norm; further, he stated that trying to run two programs was extremely difficult given existing resources and our desire to excel. Dr Taylor noted that with this proposal, the School would be the only school of social work in BC that is completely focused on a clinical practice model. Associated with that model is an intrerprofessional clinic between nursing, social work, and psychology that will place masters-level students in clinic for their practicum both as a service for the community and to provide a novel form of study in Canada. The ability to succeed in this model will only come about from having the opportunity to have and grow master’s students.

Dr Taylor explained that the School viewed this as the best opportunity to take the support available from the University and move the study of Social Work forward in a dynamic manner. He further stated that running two programs for the future was not sustainable for UBC Okanagan and thus he had been and would continue discussions with Okanagan College to have them prepare students for entry to the Master of Social Work program as a way of retaining these students in the Okanagan valley. The Program was also in similar talks with Thompson Rivers University.

The Director then noted that the School was taking appropriate measures to ensure current students can move to graduation, and to give alternatives for students who have not been admitted but planned to study social work at the undergraduate level at the Okanagan campus.

Senator Krupa said that the students most affected would be those in 2<sup>nd</sup> year who planned to transfer; he asked if the suspension of admission could be delayed one year so that they could start and finish the undergraduate program.

Dr Taylor replied that the undergraduate program's accreditation ended June 2016. We need to have students graduate prior to that date and thus delaying implementation by a year would not be possible.

Senator Baez noted that she had received correspondence from a number of students in the BSW program expressing their surprise at the proposal. She asked other than by email how is the school communicating this to them.

Dr Taylor stated in addition to several comprehensive emails sent out to all students, he had offered to be available on every Friday to meet with students and had attended most of the larger classes that were pre-requisites to the Bachelor of Social Work to explain the situation. Should Senate approve the proposal, the School is planning an assembly of all faculty and students to talk about next steps.

Senator Dods stated that while she appreciated that social work was working on student anxiety, there was also a great deal of anxiety in the aboriginal community about support for that community without the BSW as well as for continued opportunities for aboriginal students to be able to pursue an undergraduate degree in social work.

Dean Binsted noted that there was broad consultation internally and externally and that this proposal was brought to the external advisory committee for the School. Further, the demand for a Bachelor of Social Work in the Okanagan Valley has been considered and there are still 7 programs available either in person or online in British Columbia.

Dr Taylor added that the essence of the proposal was sent to over 100 practitioners and that the School had received little feedback. The proposal was brought to the School's aboriginal advisory committee for the School, both relevant government ministries, and was shared with other social work deans and directors in the region.

With permission of the Chair, Lyle Muller noted that several aboriginal professionals worked with the school to provide advice, recommendations and guidance. He read a statement from that advisory council.

Senator Cioe opined that Senate had to pick one program over the other. He noted that the Okanagan campus could no longer look forward to increased funding each year and thus for Social Work to survive and thrive it had to pick one program or the other. He suggested that to lose the graduate program would not only harm research but remove the benefits that the graduate program provided to the local community. He further noted that Master of Social Work graduates can be registered as clinical counselors in BC and this gives them much better opportunities. Dr Cioe reminded the Senate that while there were many Bachelor of Social Work programs, the Master of Social Work was the optimal use of our limited resources at UBC Okanagan.

Senator Robinson asked about sustainability for the school. She noted that the one-year Master of Social Work program was highly subscribed and asked about expectations for enrolment in the two-year program.

Dr Taylor responded that no other program in Canada would have a clinical opportunity such as ours; this will also give us an opportunity to welcome students here in the summer and have summer field placements.

Senator Johnson expressed concern at the School not having the resources to support both of its existing programs.

The Provost replied that in the School, there has been careful consideration and reasoning on the merits of the proposal: The Bachelor of Social Work is a popular and good degree but the world is moving towards a need for the Master of Social Work program. There are seven other BSW programs in BC that will continue to meet that need, and the expanded Master of Social Work program will well serve the needs of the Okanagan and Canada. Dr Pue described Social Work's proposal as a strategic choice.

Dean Bosetti spoke in favour of the motion. She noted that Education was challenged by other programs at the Bachelor's level and encroachment from the US. She suggested that it was appropriate and strategic for a research university to focus at the graduate level if it has to make a choice. For her own faculty, she noted that in Australia, research universities are moving to MEds as entry to practice.

Several senators spoke of the importance of ensure that Okanagan College has a program in place to prepare students to move into the Master of Social Work program.

Dean Binsted stated that Dr Taylor alluded to conversations with Okanagan College and should Senate approve this proposal we will continue to work with the Dean of Arts at Okanagan College on how they can help their students move into this program.

Approved.

### Curriculum Committee

*See Appendix A: Curriculum Summary*

The Committee Chair, Dr Dwayne Tannant, presented.

<i>Dwayne Tannant</i>	}	<i>That Senate approve the new course, the new program, the revised program requirements, the discontinued program, and the degree parchment revisions brought forward from the Faculties of Arts and Sciences, Creative and Critical Studies, and Health and Social Development as set out in the attached proposals.</i>
<i>Jan Cioe</i>		

Dr Tannant explained the nature of each of the proposed changes.



Senator Robinson asked about double counting of credits in the Arts & Science proposal: Could someone complete an honours degree with the same number of credits as someone with a non-honours degree.

The Committee Chair noted that this was a topic of consideration at the Committee as well.

Senator Cioe confirmed that it was possible, but that it was not the number of credits that mattered but how those credits were configured. This proposal was designed so that students would not have to duplicate credits but not allow them to be diluted either. He noted that the regulation warned students appropriately and that there had not been many problems with a similar structure in Vancouver.

With respect to the printing of additional material on degree parchments, Senator Johnson asked if other faculties printed majors and specializations.

With permission of the Chair, Associate Registrar Eaton replied that around 1/3<sup>rd</sup> of our programs currently print majors on degree parchments.

The Deputy Vice-Chancellor suggested that the Curriculum Committee review the matter of material to be printed on degree parchments generally; the Committee chair agreed.

Senator Roberts asked for the motivation for the Bachelor of Arts in Health Studies discontinuation.

Dean Binsted replied that due to lack of student interest we discontinued admission several years prior; now that these students have graduated or otherwise left, the Faculty was now moving to close the program.

Approved.

### **Nominating Committee**

The Committee Chair, Mr Tse presented.

#### **STUDENT SENATOR COMMITTEE REASSIGNMENTS.**

*Curtis Tse  
Tim Krupa*

}

*That Senate approve that Senator Tim Smith be reassigned from the Curriculum Committee to serve as a student member of the Admissions and Awards Committee until 31 March 2013 and thereafter until replaced.*

Approved.

**SENATE LEARNING AND RESEARCH COMMITTEE: ADJUSTMENTS TO EX-OFFICIO MEMBERSHIP**

*Peter Arthur* } *That Senate approve that the Ex-Officio*  
*Jan Cioe* } *membership of the Senate's Learning and*  
*Research Committee be amended so that both*  
*the President and Deputy Vice-Chancellor are*  
*ex-officio (voting) members of the Committee.*

Approved.

**ELECTION OF STUDENT SENATORS TO THE COUNCIL OF SENATES**

*Curtis Tse* } *That Senate elect Mr. Chun Li and Mr. Simon*  
*Jan Cioe* } *Bullock to the Council of Senates.*

Approved.

**CURRICULUM COMMITTEE MEMBERSHIP**

*Curtis Tse* } *That Senate appoint Dr Paul van Donkelaar to*  
*Miriam Grant* } *replace Dr Deborah Roberts on the Senate*  
*Curriculum Committee until 31 August 2014."*

Approved.

**Reports from the Provost**

**ONLINE TEACHING EVALUATIONS**

At the request of the Provost, Dr Arthur spoke to online teaching evaluation implementation. He reminded senators that prior to this year, the Okanagan campus used paper evaluations. Last year, a proposal was brought forward to change to online teaching evaluations. The questions did not change. The only other change is quicker tabulation of results.

Senator Krupa noted that the evaluation process asked for CWLs; he asked what assurances were given that the evaluations would be confidential.

Senator Arthur replied that while the evaluations were anonymous, we unfortunately cannot change the login system used to access them.

In response to a question from Senator Dods, Dr Arthur replied that uptake so far was good. He hoped for around a 60% response rate.

Fes de Scally asked if there would be a distribution problem with optional online evaluations.

Senator Arthur replied that Vancouver did the needed research when they moved to online and they did not find a bimodal distribution.

Senator Johnson opined that that the problem wasn't bimodal distribution but rather selection bias.

Senator Arthur replied that the previous in-class one-time sample had problems as well. He viewed the online system as preferable as it gave all students the opportunity to respond.

Senator Cioe stated that self-selection was only a problem with low uptake. With higher rates this would not be a problem.

A student senator asked if UBC would publicise results to students.

Senator Arthur replied that this was not considered.

The Provost added that the decision to go online was about efficiency, accuracy, and sustainability. That process did not include consideration of changing the questions or what we do with the responses. We did not want to adjust evaluation system itself as part of changing the administration from paper to electronic.

It was confirmed for Senator Robinson by Dr Arthur that instructors would be given the same data as they did with the paper-based system. He further confirmed for Senator van Donkelaar that in the near-future they hoped to display these data better online.

Senator Cioe spoke strongly in support of the students having access. He noted that in his time at the University of Western Ontario, the student union produced a formal counter-calendar. He suggested that the publication of results would encourage faculty members to be better teachers.

Senator Krupa thanked Dr Cioe for his comments. In terms of selection bias, he suggested that this was always the case; apathetic students would ignore the forms.

Senator Tse noted that the student union had considered its own teaching evaluations but it was too difficult to do well for this year.

Dean Tetley said that there was a difference between students having access and the data being public. Public has other implications and would result in a loss of needed control. He supported students having the data but not it being public.

### **IN CAMERA – Tributes Committee – Honorary Degrees**

Minutes for this portion of the meeting are not public for reasons of personal privacy.

### **Adjournment**

There being no further business, the meeting was adjourned at 5:13 pm.

## **Appendix A: Curriculum Summary**

### *From the Faculty of Arts and Sciences*

1. The following revised program requirements:
  - a. B.A., B.Sc. – Double Counting of Credits in Honours, Majors, and Minors (joint proposal with the Faculty of Creative and Critical Studies)

### *From the Faculty of Creative and Critical Studies*

2. Revisions to the Bachelor of Fine Arts (B.F.A.) Degree Parchment
3. The following new program:
  - a. Combined Major with Creative Writing

### *From the Faculty of Health and Social Development*

4. The following new course:
  - a. HMKN 335 (3) Pathophysiology
5. The following discontinued program:
  - a. Bachelor of Arts in Health Studies (B.A.H.S.)

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

### External Group

August 27	Paul Davidson, President and CEO, Christine Tausig-Ford, Vice-President and COO, and Joanne Lalonde, Senior Director of Corporate Services, Association of Universities and Colleges of Canada (AUCC)
August 27	Alisdair Jones, Research Director, Shanghai Ranking Consultancy
August 27	Irfhan Rawji, Chair, and Shannon von Kaldenberg, Chief Philanthropy Officer (Canada), Heart and Stroke Foundation of Canada
August 28	Amir Nasrabadi, Vice-President and General Manager, Pixar Canada
August 28	Brent Cameron, Partner, Odgers Berndtson (Vancouver)
August 28	Keith Mitchell, Chair, Farris, Vaughan, Wills and Murphy LLP
August 29 – 30	U-15 Group of Canadian Research Universities Retreat
August 31	Association of Universities and Colleges of Canada (AUCC) Finance and Executive Committee Meetings
September 3	Amit Chakma, President, University of Western Ontario
September 4	Tom Chan, Chairman, Liberty Commons Ltd.
September 5	Robin Ciceri, President, The Research Universities' Council of British Columbia (RUCBC)
September 5	David Mitchell, President and CEO, Public Policy Forum
September 5	Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
September 6	Peter Wall, Founder, Wall Financial Corporation
September 7	Martha Piper, Director, Board of Directors, Bank of Montreal, and Former President, UBC
September 7	Rick Goossen, Chairman, Advisory Board, Entrepreneurial Leader Organization
September 10	Christine Tausig-Ford, Vice-President and COO, Association of Universities and Colleges of Canada (AUCC)

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

September 10	Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
September 10	John Rae, Executive Vice-President, Office of the Chairman of the Executive Committee, Power Corporation of Canada
September 12	Alan Bernstein, President and CEO, Canadian Institute for Advanced Research (CIFAR)
September 14	Andrew Petter, President, Simon Fraser University (SFU)
September 14	The Research Universities' Council of British Columbia (RUCBC) Presidents Committee Meeting
September 14	Great Northern Way Campus Presidents: Andrew Petter, President, Simon Fraser University (SFU), Ron Burnett, President, Emily Carr University, and Don Wright, President, British Columbia Institute of Technology (BCIT)
September 21	Nigel Harris, Vice-Chancellor, University of the West Indies
September 21	2012 Global Business Forum: Finding Opportunities for Growth and Prosperity in Changing Times and Closing Dinner hosted by Douglas Mitchell, National Co-Chair, Borden Ladner Gervais, and Lois Mitchell, Senior Partner, Rainmaker Global Business Development
September 24	Paul Davidson, President and CEO, Christine Tausig-Ford, Vice-President and COO, and Joanne Lalonde, Senior Director of Corporate Services, Association of Universities and Colleges of Canada (AUCC)
September 24 – 25	Canadian Council of Chief Executives' <i>Canada in the Pacific Century</i> Conference
September 24	Association of Pacific Rim Universities (APRU) Steering Committee Meeting
September 28 – 29	McGill University, Faculty of Law Conference: <i>Stateless Law? The Future of Discipline</i>
September 29	Kip Cobbett, Chair, Board of Governors, McGill University, and Partner, Stikeman Elliott LLP
October 1	The Research Universities' Council of British Columbia (RUCBC) Meeting with the Presidents and Vice-Presidents External Relations and Government Relations

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

October 1	Doug Pearce, CIO, British Columbia Investment Management Corporation
October 1	Deshui Jin, Chairman, University Council, Ping Wu, Vice-President International Relations, Meifeng Zhang, Assistant President and Director, Alumni Affairs, and Fei Xue, Deputy Director, International Relations, Zhejiang University (China)
October 2	David Naylor, President, University of Toronto
October 2	Lei Zhang, Chairman, and Robbie Zhang, Managing Director (Canada), Modern Green Development
October 4	Michael Kim, Partner, and James Yoon, Partner, Head of Korea Office, MBK Partners Ltd.
October 4	Sang-Yong Park, Dean, Yonsei University School of Business (South Korea)
October 4	Suck Chul Yoon, President, Hanmaum Peace and Research Foundation, Endowed Chair and Professor, Hanyang University, and Professor Emeritus, Seoul National University, and Jung Yi Lee, Director, Hanmaum Peace and Research Foundation (Seoul, South Korea)
October 4 – 6	Canada-Korea Forum 10 (Co-Chair) (Seoul, South Korea)
October 8	Tim Brodhead, Former President and CEO, JW McConnell Family Foundation, Member, UBC President's Advisory Committee
October 9	Sarah Bevan, Managing Director, President and CEO, UBS Bank (Canada), UBS Investment Management Canada Inc.
October 9	Stephen Jarislowsky, Chairman, CEO and Director, Jarislowsky Fraser Ltd., and President, Jarislowsky Foundation
October 9	World University Service of Canada (WUSC) 2012 Lewis Perinbam Award Committee Meeting
October 9	Jane Usherwood, Secretary General, Universitas 21 (U21)
October 9	Harvey Weingarten, President and CEO, Higher Education Quality Council of Ontario (HEQCO)
October 9	Jacqueline L. Koerner, Founding Member and Past Chair, Ecotrust Canada
October 9	Roy Heenan, Chairman and Founding Partner, Heenan Blaikie LLP



## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

October 9	John Rae, Executive Vice-President, Office of the Chairman of the Executive Committee, Power Corporation of Canada
October 10	Jean Simon, President, Primary Metal for North America, Rio Tinto Alcan
October 10	Iain Black, President and CEO, Vancouver Board of Trade
October 10	Howard Davidson, President, R. Howard Webster Foundation
October 11	Christine Melton, Ophthalmologist and President, Aravind Eye Foundation
October 11	Chris Eaton, Executive Director, World University Service of Canada (WUSC)
October 11	George Iwama, President, University of Northern British Columbia (UNBC)
October 16	Qun Chen, President, Shuzhe Ding, Director of International Exchange Division, Binyan Xu, Associate Dean of the School of Educational Science, and Shu Wan, Deputy Director of University Office, East China Normal University
October 16	Paul Davidson, President and CEO, Christine Tausig-Ford, Vice-President and COO, Association of Universities and Colleges of Canada (AUCC), and David Barnard, President and Vice-Chancellor, University of Manitoba
October 17	The Research Universities' Council of British Columbia (RUCBC) Presidents' Meeting
October 17	World University Service of Canada (WUSC) Executive Committee Meeting
October 17	Harvey Weingarten, President and CEO, Higher Education Quality Council of Ontario (HEQCO)
October 17	Jane Griffith, Principal, Odgers Berndtson (Ottawa)
October 19	Colin Dodds, President, St. Mary's University
October 19	The Research Universities' Council of British Columbia (RUCBC) Presidents Committee Meeting
October 19	Douglas Mitchell, National Co-Chair, Borden Ladner Gervais
October 21	Paul Davidson, President and CEO, Christine Tausig-Ford, Vice-President and COO, and Pari Johnston, Director of Member Relations, Association of Universities and Colleges of Canada (AUCC)

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

October 22	Jack Lightstone, President and Vice-Chancellor, Brock University
October 21-22	Association of Universities and Colleges of Canada's (AUCC) Advocacy Day on the Hill
October 23-25	Association of Universities and Colleges of Canada (AUCC) Board of Directors and Membership Meetings
October 24	Association of Universities and Colleges of Canada (AUCC) Breakfast with Members Regarding Proposals for Restructuring Canadian University Sport from the Canada West University Athletics Association (Chaired by Prof. Stephen Toope)
October 24	David Mitchell, President, Public Policy Forum
October 26	Michael Koerner, President, Canada Overseas Investments Ltd.
October 26	David Barnard, President, University of Manitoba
October 26	Dan Muzyka, President and CEO, and Michael Bloom, Vice-President, Organizational Effectiveness and Learning, The Conference Board of Canada
October 26	U-15 Group of Canadian Research Universities Executive Heads Meeting
October 31	Brad Bennett, President, McIntosh Properties Ltd.
November 2	Patrick Kenniff, Partner, Kenniff and Racine, Inc.
November 2	World University Service of Canada (WUSC) Board of Directors Meeting
November 4	Roy MacLaren, Chair of the Board, India-Canada Centre for Innovative Multidisciplinary Partnership to Accelerate Transformation and Sustainability (IC-IMPACTS)
November 5	David Naylor, President, and Peter Lewis, Associate Vice-President Research, University of Toronto
November 6	Paul Davidson, President and CEO, Association of Universities and Colleges of Canada (AUCC), and Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
November 7	Kavita Sharma, Director, India International Centre (IIC) (Delhi, India)

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

November 9	Patrick Kenniff, Partner, Kenniff and Racine Inc.
November 9	Kyle Mitchell, Partner, Odgers Berndtson (Vancouver)

### Government

August 31	Greg Peet, Co-Chair, Premier's Technology Council, and Board Member, UBC
August 31	Ian Rongve, Assistant Deputy Minister, Sector Strategy and Quality Assurance, Ministry of Advanced Education, Innovation and Technology, Province of British Columbia
September 5	Graham Whitmarsh, Deputy Minister, Ministry of Health, Province of British Columbia
September 6	Post-Secondary Sector Administrative Service Delivery Transformation Executive Committee Meeting with Cheryl Wenezenki-Yolland, Deputy Minister, Ministry of Advanced Education, Innovation and Technology, Province of British Columbia
September 6	John Yap, Minister, Ministry of Advanced Education, Innovation and Technology, Minister Responsible for Multiculturalism, and MLA (Richmond-Steveston), Province of British Columbia
September 12	Cheryl Wenezenki-Yolland, Deputy Minister, Ministry of Advanced Education, Innovation and Technology, Province of British Columbia
September 13	Private Roundtable with Cheryl Wenezenki-Yolland, Deputy Minister, Ministry of Advanced Education, Innovation and Technology, Province of British Columbia, and others prior to Prof. Stephen Toope's Vancouver Board of Trade Speech
September 13	Rupert Potter, Consul General of the United Kingdom to Vancouver, Government of the United Kingdom
September 18	Moira Stilwell, Minister of Social Development, and MLA (Vancouver-Langara), Province of British Columbia
September 24	Neil Yeates, Deputy Minister, Citizen and Immigration Canada, Government of Canada

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

September 24	Gary Goodyear, Minister of State, Science and Technology, Government of Canada
September 28	John Yap, Minister, Ministry of Advanced Education, Innovation and Technology, Minister Responsible for Multiculturalism, and MLA (Richmond-Steveston), Province of British Columbia
October 1	Adrian Dix, MLA (Vancouver-Kingsway), Province of British Columbia
October 11	Ellen Passmore, Director, Strategic Policy and Initiatives Branch, Ministry of Training, Colleges and Universities, Province of Ontario
October 15	John Yap, Minister, Ministry of Advanced Education, Innovation and Technology, Minister Responsible for Multiculturalism, and MLA (Richmond-Steveston), Province of British Columbia
October 15	Post-Secondary Sector Administrative Service Delivery Transformation Executive Committee Meeting with Cheryl Wenezenki-Yolland, Deputy Minister, Ministry of Advanced Education, Innovation and Technology, Province of British Columbia
October 18	The Research Universities' Council of British Columbia (RUCBC) Presidents' Meeting with Carole James, MLA (Victoria-Beacon Hill), and Bruce Ralston, MLA (Surrey-Whalley), Province of British Columbia
October 18	Moira Stilwell, Minister of Social Development, and MLA (Vancouver-Langara), and Joan Dick, Ministerial Assistant, Province of British Columbia
October 22	Margaret Biggs, President, Canadian International Development Agency (CIDA), Government of Canada
October 22	Association of Universities and Colleges of Canada (AUCC) Reception and Dinner with Piragibe dos Santos Tarragô, Ambassador of Brazil to Canada, Government of Brazil
October 23	Association of Universities and Colleges of Canada (AUCC) Breakfast with Members for the Conservative Post-Secondary Education (PSE) Caucus, Co-Hosted by Rod Bruinooge, Founder, PSE Caucus, and MP (Winnipeg South), Province of Manitoba
October 23	Association of Universities and Colleges of Canada (AUCC) Advocacy Day on the Hill Meeting with Morris Rosenberg, Deputy Minister, Foreign Affairs, Government of Canada

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

October 23	Association of Universities and Colleges of Canada (AUCC) Advocacy Day on the Hill Meeting with Michael Wernick, Deputy Minister, Indian Affairs and Northern Development, Government of Canada
October 23	Jim Flaherty, Minister of Finance, Government of Canada, and Minister Responsible for the Greater Toronto Area, and MP (Whitby-Oshawa), Province of Ontario, and Heather Munroe-Blum, Principal and Vice-Chancellor, McGill University
October 23	Association of Universities and Colleges of Canada (AUCC) Advocacy Day on the Hill Meeting with Jim Flaherty, Minister of Finance, Government of Canada, and Minister Responsible for the Greater Toronto Area, and MP (Whitby-Oshawa), Province of Ontario, Heather Munroe-Blum, Principal and Vice-Chancellor, McGill University, Elizabeth Cannon, President and Vice-Chancellor, University of Calgary, David Barnard, President and Vice-Chancellor, University of Manitoba, Paul Davidson, President and CEO, AUCC
October 23	Association of Universities and Colleges of Canada (AUCC) Advocacy Day on the Hill Meeting with John Knuble, Deputy Minister, Industry Canada, Government of Canada
October 25	Association of Universities and Colleges of Canada (AUCC) Lunch with Nigel Wright, Chief of Staff, Office of the Prime Minister, Government of Canada
October 26	Private Sector/Post-Secondary Executive Roundtable hosted by Prof. Stephen Toope, with Gary Goodyear, Minister of State, Science and Technology, Robert Dunlop, Assistant Deputy Minister, Science and Innovation, Industry Canada, Government of Canada, and others
November 5	Federation of Indian Chambers of Commerce and Industry (FICCI) Higher Education Summit with Edward Fast, Minister of International Trade, Minister for the Asia-Pacific Gateway, Government of Canada, and MP (Abbotsford), Province of British Columbia, and David Naylor, President, University of Toronto
November 5	Arabinda Mitra, Head, International Bilateral Cooperation Division, Ministry of Science and Technology, Government of India, David Naylor, President, University of Toronto, and Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
November 5	Business Roundtable Delegation Chaired by Edward Fast, Minister of International Trade, Minister for the Asia-Pacific Gateway, Government of Canada, and MP (Abbotsford), Province of British Columbia (Delhi, India)

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

November 5	Canada-India Business Council (C-IBC) Reception Hosted by Stewart Beck, High Commissioner of Canada to the Republic of India, with Edward Fast, Minister of International Trade, Minister for the Asia-Pacific Gateway, Government of Canada, and MP (Abbotsford), Province of British Columbia
November 5	Shashi Tharoor, Minister of State in the Human Resource Development Ministry, Government of India, and David Naylor, President, University of Toronto
November 6	Edward Fast, Minister of International Trade, Minister for the Asia-Pacific Gateway, Government of Canada, and MP (Abbotsford), Province of British Columbia, David Naylor, President, University of Toronto, and Paul Davidson, President and CEO, Association of Universities and Colleges of Canada (AUCC)

### Travel

August 29 – 30	Toronto, ON – U-15 Working Dinner and Retreat
September 4	Kelowna, BC – Create: New Student Orientation Kickoff Event at UBC Okanagan Campus
September 19 – 20	Kelowna, BC – Major Entrance Scholarship Reception, President's Town Hall, UBC Board Meeting, and Reichwald Health Sciences Centre Opening
September 21	Banff, AB – 2012 Global Business Forum
September 22 – 25	Ottawa, ON – Government meetings and <i>Canada in the Pacific Century</i> Conference
September 27 – 29	Montreal, QC – McGill University, Faculty of Law Conference: <i>Stateless Law? The Future of Discipline</i>
October 2 – 7	Seoul, South Korea – Canada-Korea Forum 10
October 7 – 10	Montreal, QC – Development meetings and UBC Campaign event
October 10 – 14	New York, USA – Development meetings and UBC Campaign event
October 18	Victoria, BC – Government meetings with RUCBC Presidents

<h2 style="margin: 0;">Record of President's Activities</h2> <h3 style="margin: 0;">Period of: 27 August 2012 to 9 November 2012</h3>
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October 21 – 25	Ottawa, ON – AUCC Day on the Hill, Board of Directors and Membership meetings
October 25 – 26	Toronto, ON – Gairdner Dinner, Private Sector/Post-Secondary Executive Roundtable, and Development meeting
November 1 – 2	Ottawa, ON – WUSC Board of Directors meeting
November 3 – 8	New Delhi – India – Government meetings, MITACS event and member of the official Canadian delegation led Prime Minister Stephen Harper

### Speeches / Events

September 4	Create: New Student Orientation's Kickoff Event, Okanagan Campus
September 4	Imagine UBC Pep Rally, Vancouver Campus
September 6	Videotaping for BC Children's Hospital Foundation event to celebrate Dr. Djavad Mowafaghian's 2012 Order of British Columbia award
September 6	UBC Campaign Cabinet Dinner at Norman MacKenzie House
September 10	President's Town Hall, Vancouver Campus
September 10	Special Honorary Degree Ceremony for Elie Wiesel, 1986 Nobel Peace Prize Winner and Holocaust Survivor
September 10	Jewish Federation of Greater Vancouver's Annual Campaign Opening reception and dialogue with Elie Wiesel
September 11	Kick-Off Reception for the 10-Year Anniversary of the Advisory Urban Design Panel
September 12	UBC Staff BBQ (campus-wide event)
September 12	Reception in honour of UBC's Major Entrance Scholars, Vancouver Campus
September 12	entrepreneurship@UBC – The Next 36 Academic Partnership Plan Announcement and Kick-Off
September 12	1962 Civil Engineering Class Reunion Hosted by Jim Shepard, Former CEO, Canfor, and Deb Taylor

## Record of President's Activities

### Period of: 27 August 2012 to 9 November 2012

September 13	Opening of the Bioenergy Research and Demonstration Facility (BRDF)
September 13	Vancouver Board of Trade Luncheon, Distinguished Speaker Program (Keynote speaker: Professor Stephen Toope)
September 14	Senior Appointments Committee (SAC) Introductory Meeting
September 18	Opening of the Pharmaceutical Sciences Building
September 18	President's Staff Awards Reception
September 18	Reception for Sarah Morgan-Silvester hosted by the BC Women's Hospital and Health Centre Foundation
September 19	Reception in honour of UBC's Major Entrance Scholars, Okanagan Campus
September 19	President's Town Hall, Okanagan Campus
September 20	Opening of the Reichwald Health Sciences Centre with Christy Clark, Premier, Province of British Columbia
September 24	Videotaping for the Association of Universities and Colleges of Canada's (AUCC) Advocacy Day on the Hill
September 28	Panelist and Speaker at McGill University's Faculty of Law Conference: <i>Stateless Law? The Future of the Discipline</i>
October 1	Provost's Meeting with Heads and Directors of Academic Units
October 5 – 6	Opening and Closing Remarks for Canada-Korea Forum 10 (Co-Chair) (Seoul, South Korea)
October 9	<i>start an evolution</i> : Montreal Celebration hosted by John Rae, Executive Vice-President, Office of the Chairman of the Executive Committee, Power Corporation of Canada
October 11	<i>start an evolution</i> : New York Celebration hosted by Christine Melton, Ophthalmologist and President, Aravind Eye Foundation
October 15	45 <sup>th</sup> Annual Killam Celebration Ceremony and Reception to honour UBC's 2012 Killam Scholars
October 16	Institute of Asian Research (IAR) 35 <sup>th</sup> Anniversary Reception and Thank-You to Paul Evans, Former Director, IAR



<p><b>Record of President's Activities</b>  <b>Period of: 27 August 2012 to 9 November 2012</b></p>
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October 17	Academic All-Canadians Breakfast of Champions
October 18	2012 President's Blue and Gold Revue
October 23	Association of Universities and Colleges of Canada (AUCC): Reception to Celebrate "Innovation Partnerships"
October 29	Robert (Bob) Philip: Celebrating 20 Years of Success (for his term as Athletics Director, UBC Athletics)
October 30	Videotaping for UBC Campaign Celebration in Toronto
October 31	Women Faculty in Leadership Forum
November 5	Reception hosted by Hari Bhartia, Co-Chairman and Managing Director, Jubilant Life Sciences Ltd. (Delhi, India)
November 6	Canada-India CEO Forum (Delhi, India)
November 6	Canada-India Business Council (C-IBC) Business Forum – Education Breakout Session 3: "Bridging the Skills Gap: the Next Stage" (Panelist) (Delhi, India)
November 7	Opening Remarks for Mathematics of Information Technology and Complex Systems (MITACS) – India-Canada Research and Advanced Training Collaboration Roundtable (Delhi, India)
November 7	UBC Alumni and Friends Dinner in New Delhi, India

### **Student Events / Meetings**

September 19	UBC Student Union, Okanagan (UBCSUO) Executives
October 1	Alma Mater Society (AMS) Executives, Vancouver Campus
October 1	Graduate Student Society (GSS) Executives, Vancouver Campus

<p><b>Record of President's Activities</b>  <b>Period of: 27 August 2012 to 9 November 2012</b></p>
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### Media Interviews

September 24	Association of Universities and Colleges of Canada's (AUCC) meeting with the Ottawa Citizen Editorial Board
September 27	James Bradshaw, Education Reporter, The Globe and Mail
October 18	The Research Universities' Council of British Columbia (RUCBC) Presidents' Meeting with the Times Colonist Editorial Board
October 18	Janet Steffenhagen, Reporter, The Vancouver Sun
October 19	Bill Goode, Program Host, CKNW with David Turpin, President, University of Victoria (UVic), and George Iwama, President, University of Northern British Columbia (UNBC)
October 19	Harvey Enchin, Editorial Board Member, Craig McInnes, Columnist, and Barbara Yaffe, Columnist, The Vancouver Sun with The Research Universities' Council of British Columbia (RUCBC) Presidents
November 7	Stephanie Nolen, South Asia Bureau Chief, The Globe and Mail

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**December 19, 2012**

**To: Okanagan Senate**

**From: Admissions and Awards Committee**

**Subject: Admissions Proposal (approval)**  
**i. Canadian Aboriginal Students**

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The Admissions and Awards Committee is pleased to recommend the following to Senate:

**i. Canadian Aboriginal Students**

Revise the Academic Calendar entry to remove reference to the Aboriginal supplemental (which has been replaced by the personal profile under Senate policy O-50), and include language that specifies that Aboriginal applicants must self-identify in order to be considered under the Canadian Aboriginal Applicants admissions policy.

*Motion: That Senate approve the admissions proposals for i. Canadian Aboriginal Applicants for admission to the 2013 Winter Session and thereafter.*

Dr. Spiro Yannacopoulos  
Chair, Admissions and Awards Committee



## Admissions Proposal Form – Okanagan Campus

<p><b>Department:</b> Undergraduate Admissions  <b>Effective Session:</b> 2013W (for inclusion in the Academic Calendar immediately following approval for the purpose of advising perspective students)</p>	<p><b>Date:</b> October 18, 2012  <b>Contact Person:</b> Ms. Manjinder Sidhu, Admissions and Enrolment Support Manager  <b>Phone:</b> 250.807.8835  <b>Email:</b> <a href="mailto:manjinder.sidhu@ubc.ca">manjinder.sidhu@ubc.ca</a></p>
<p><b>Proposed Academic Calendar Entry:</b></p> <p><a href="#">Homepage (draft) Admissions</a>  Canadian Aboriginal Applicants</p> <h3>Canadian Aboriginal Applicants</h3> <p><b>[49]</b> The University of British Columbia is dedicated to making its vast resources more accessible to Aboriginal people, and to improving its ability to meet their educational needs. The University recognizes that Aboriginal students make valuable contributions to its learning environment and therefore invites inquiries and applications from Aboriginal candidates to its many and diverse fields of study.</p> <p><b>[50]</b> The UBC Okanagan campus may consider applicants who do not meet the current competitive admission cut-off set by the individual faculties and schools, but who meet the University-wide academic minimum of 67% for direct-entry degree programs or a grade point average of 2.0 (calculated on a 4.0-point scale) for applicants applying from a recognized post-secondary institution. Applicants must</p>	<p><b>Draft Calendar URL:</b>  <a href="http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=2,14,0,0">http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=2,14,0,0</a></p> <p><b>Present Academic Calendar Entry:</b></p> <p><a href="#">Homepage (draft) Admissions</a>  Canadian Aboriginal Applicants</p> <h3>Canadian Aboriginal Applicants</h3> <p><b>[49]</b> The University of British Columbia is dedicated to making its vast resources more accessible to Aboriginal people, and to improving its ability to meet their educational needs. The University recognizes that Aboriginal students make valuable contributions to its learning environment and therefore invites inquiries and applications from Aboriginal candidates to its many and diverse fields of study.</p> <p><b>[50]</b> The UBC Okanagan campus may consider applicants who do not meet the current competitive admission cut-off set by the individual faculties and schools, but who meet the University-wide academic minimum of 67% for direct-entry degree programs or a grade point average of 2.0 (calculated on a 4.0-point scale) for applicants applying from a recognized post-secondary institution. Applicants must</p>



also satisfy program prerequisites set by the individual faculties and schools.

**[15185]** The UBC Okanagan campus will admit Aboriginal students to direct-entry degree programs who have completed 18 university-level credits with a minimum 60% in each course and a 60% or C average overall. 12 credits of this coursework must be from UBC Okanagan campus courses, of which 3 credits must be from either ENGL 112 or ENGL 114. Students must also satisfy program prerequisites and admission requirements set by the individual faculties and schools.

**[8413]** To be considered under this admission category, applicants must **self-identify as an Aboriginal applicant on their** application for admission to UBC. Applicants will **then** be considered on an individual basis by the applicable faculty or school in consultation with a representative of the UBC Okanagan campus' Aboriginal Programs and Services. Achievements that indicate an ability to succeed at university such as educational history, cultural knowledge, community participation, work experience, and educational goals will be considered.

**[51]** For the purpose of application and admission to the UBC Okanagan campus, and in accordance with the *Constitution Act, 1982*, Part II, Section 35(2), being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11, an Aboriginal applicant is an Indian, Inuit, or Metis person of Canada.

also satisfy program prerequisites set by the individual faculties and schools.

**[15185]** The UBC Okanagan campus will admit Aboriginal students to direct-entry degree programs who have completed 18 university-level credits with a minimum 60% in each course and a 60% or C average overall. 12 credits of this coursework must be from UBC Okanagan campus courses, of which 3 credits must be from either ENGL 112 or ENGL 114. Students must also satisfy program prerequisites and admission requirements set by the individual faculties and schools.

**[8413]** To be considered under this admission category, applicants must ~~complete an Aboriginal Supplemental Application in addition to the~~ application for admission to UBC. Applicants will be considered on an individual basis by the applicable faculty or school in consultation with a representative of the UBC Okanagan campus' Aboriginal Programs and Services. Achievements that indicate an ability to succeed at university such as educational history, cultural knowledge, community participation, work experience, and educational goals will be considered.

**[51]** For the purpose of application and admission to the UBC Okanagan campus, and in accordance with the *Constitution Act, 1982*, Part II, Section 35(2), being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11, an Aboriginal applicant is an Indian, Inuit, or Metis person of Canada.

**Type of Action:** Revise Academic Calendar entry.

**Rationale:** The Aboriginal Admissions policy forms a cornerstone of the University's commitment towards



**a place of mind**

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	<p>improving accessibility to the educational goals of Aboriginal people at the UBC Okanagan campus. Through consultation between Aboriginal Programs and Services, Undergraduate Admissions, and faculties/schools, procedures have been established to enact this policy for self-identifying Aboriginal applicants. Historically, part of the established procedures involved applicants not only self-identifying but also submitting an optional Aboriginal supplemental. This procedural information was included in the policy with no mention about the step of self-identification required. For the 2013W cycle onwards, the personal profile questions have replaced the Aboriginal supplemental and the Academic Calendar entry requires revision as a result.</p> <p>With intent to focus on the purpose of the Academic Calendar, modifications have been made to the policy to include the step of self-identification and remove reference to the Aboriginal supplemental.</p> <p>See enclosed table which shows the supplemental questions in comparison to the Personal Profile questions.</p>
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**Aboriginal Supplemental Questions (2012)****Personal Profile Questions (2013)**

Please tell us about your educational goals. (Maximum length: 250 words)	Tell us about an experience, in school or out, that caused you to rethink or change your perspective. What impact has this had on you?
Please describe a significant education experience you have had and explain how this experience relates to your desire to attend UBC. (Maximum length: 250 words)	Explain how you responded to a significant challenge that you have encountered and what you learned in the process.
Please list your activities and experiences, including work experience, community service, and involvement in clubs, athletic and cultural, and volunteer work for the past five years. Use the Description field to explain how you were involved in each activity. If you do not find your activity listed, select OTHER. (Please do NOT feel compelled to fill all of the spaces provided).	Describe up to five activities that you have pursued in one or more of the following areas: leadership/group contributions (e.g., student government, community activity, family responsibility; involvement in Aboriginal culture or community), sports (e.g., team membership; participation in competitions), creative and performing arts, work, service to others
Please list any awards, achievements, honors or recognition that you have received in the past five years. Include both academic and non-academic achievements such as sports, community service, and cultural achievements.	Tell us more about one of the activities you listed above, explaining what your goals were, what you did to pursue them, the results achieved, and what you learned in the process.
Please include any additional information about yourself that you would like the evaluators to consider. For instance, you might use this space to describe how you identify as an Aboriginal person. Or, you may use it to describe challenges that you have experienced during your studies that have impacted your academic performance. (Maximum length: 500 words)	Please include any additional information that you would like the Admissions Committee to consider when reviewing your application.
Please provide the names of two references who we can contact to verify the information you have provided. Your first reference must be an academic reference (a teacher, counselor, principal, instructor, or professor). Your second reference may be an Aboriginal community reference (from a recognized Aboriginal leader or organization) or an alternate community reference.	Please submit the names of two referees who know you well and can comment on your preparedness for study at UBC. Examples of referees include an employer, a community member, a coach, a teacher/instructor, or anyone who knows you well. One of the referees you select MUST be able to speak to one of the activities / experiences described in one of your long-answer responses above. For applicants who are currently attending a high school, one of your referees MUST be a school official (e.g. grade 12 or senior year counsellor, teacher, or IB Coordinator). Neither referee should be a friend, family member, or paid agent.

## THE UNIVERSITY OF BRITISH COLUMBIA

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**December 19, 2012**

**To:** Okanagan Senate

**From:** Admissions and Awards Committee

**Subject:** *Senate Policy O-52: Admission for Secondary School Applicants following the BC/Yukon Curriculum (approval)*

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The Committee recommends the following to Senate:

*Motion:* That Senate approve Senate policy O-52: Admission for Secondary School Applicants following the BC/Yukon Curriculum;

*and*

*That Senate discontinue Senate policy J-52: Admission for Secondary School Applicants following the BC/Yukon Curriculum, with such discontinuance to be effective upon the date of approval Senate policy O-52.*

### **Background**

Policy *J-52: Admission for Secondary School Applicants following the BC/Yukon Curriculum* (for the full text of the policy see <http://senate.ubc.ca/okanagan/policies>) was approved by the Okanagan Senate in February 2012, and in March 2012 by the Vancouver Senate. This policy was in response to the B.C. Teachers' Federation job action in early 2012 and was designed to allow the use of final Grade 11 course grades when a grade for a required Grade 12 course was not yet available. Policy *J-52* came into effect April 1, 2012 for the 2012 Winter Session and was to be reviewed no later than one year from its approval.

In September 2012 the Vancouver Senate discontinued policy *J-52*, and in November 2012 approved a new, replacement policy, *V-52*.<sup>1</sup>

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<sup>1</sup> NB: The Vancouver Senate's discontinuation of *J-52* for its campus does not by extension discontinue the policy for the Okanagan campus; *J-52* is thus still in force for Okanagan programs.



The Admissions and Awards Committee has considered its options, namely, to reconsider *J-52* as an 'O' or Okanagan policy, or explore a parallel discontinuation and replacement with a policy or set of policies that include conditions around the use of final Grade 11 course grades when a grade for a required Grade 12 course is not yet available. In October 2012 the Committee resolved to explore options around a parallel policy on the Okanagan campus to enact many of the same flexibilities of *V-52*, namely, a policy designed to provide a mechanism for more timely and accurate academic assessments of secondary school applicants from the BC/Yukon curriculum applying to direct-entry undergraduate programs, including a mechanism to use final course grades for Grade 11 courses when a final course grade for a required Grade 12 course was not yet available. In addition, a policy designed to more effectively incorporate English 12/English 12 First Peoples provincial examination results into admissions decisions. The result is policy *O-52*, as enclosed.

### **Rationale**

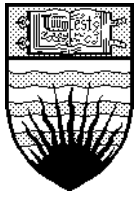
In preparing the proposed policy, the Admissions and Awards Committee and Undergraduate Admissions have engaged in a process of broad consultation within and outside of UBC including over 300 secondary school counselors from secondary schools on Vancouver Island, in the Lower Mainland, and in the Okanagan, Enrolment Services, Undergraduate Admissions, and UBC Vancouver and Okanagan Deans. The proposed policy has also been shaped by UBC's *Principles of Effective Undergraduate Admission to UBC*, approved by both Senates in 2008.

Generally speaking, faculties are supportive of the use of Grade 11 grades, and of the idea of conditionally admitting students on Grade 11 grades to ensure equity in the admissions process with applicants from other jurisdictions. Feedback has also been positive from the secondary school community.

In brief: the proposed policy is intended to address issues around making timely offers to UBC applicants on a competitive basis with UBC's peer institutions. It is commonly understood within the BC/Yukon secondary school community that UBC's offers of admission often arrive later than those from other universities. In 2011, 54% of top applicants from BC/Yukon secondary schools indicated that their offer of admission from UBC came either a) later than offers from most other institutions, or b) so late that it negatively affected their decision to attend UBC. The changes suggested will allow UBC to provide applicants and their families with the information they need in a timely manner and encourage more BC students to choose UBC for their post-secondary studies. The proposed policy is also intended to address issues where it is suspected that an artificially inflated English 12 or English 12 First Peoples course grade results in the admission of a student who is not properly prepared to be successful in first-year UBC. This issue is acknowledged in BC/Yukon secondary schools, and is often reported in the media.

For the Committee,  
Dr. Spiro Yannacopoulos  
Chair, Admissions and Awards Committee

## THE UNIVERSITY OF BRITISH COLUMBIA

SENATE POLICY:  
O-52

OKANAGAN SENATE  
c/o Enrolment Services  
3333 University Way  
Kelowna, BC Canada V1V 1V7

**Number & Title:**

O-52: *Admission for Secondary School Applicants following the BC/Yukon Curriculum*

**Effective Date:**

For admission to 2013 Winter Session and thereafter.

**Approval Date:**

Proposed for consideration by the *Okanagan Senate* on December 19, 2012.

**Review Date:**

This policy shall be reviewed three (3) years after approval and thereafter as deemed necessary by the *responsible committee*.

**Responsible Committees:**

*Admissions and Awards Committee of the Okanagan Senate.*

**Authority:**

*University Act, S. 37(1)*

*“The academic governance of the university is vested in the senate and it has the following powers:*

*(b) to establish committees it considers necessary and, by 2/3 vote of its members present, to delegate to one or more committees those of its powers as it may determine;”*

*(c) to determine all questions relating to the academic and other qualifications required of applicants for admission as students to the university or any faculty, and to determine which faculty the students pursuing a course of study must register.”*

**Purpose and Goals:**

This policy is designed to provide a mechanism for more timely and accurate academic assessments of secondary school applicants from the BC/Yukon curriculum applying to *direct-entry undergraduate programs*, including a mechanism to use *final course grades* for *Grade 11 courses* when a *final course grade* for a required *Grade 12 course* is not yet available, and more effective incorporation of English 12/English 12 First Peoples provincial examination results into admissions decisions.

**Applicability:**

This policy is applicable to *BC/Yukon Secondary School Applicants* to *direct-entry undergraduate programs* offered by faculties of the Okanagan campus of the *University*.

**Exclusions:**

This policy does not apply to applicants who have another basis of admission.

**Definitions:**

For the purposes of this policy:

*Admission Average* shall mean the academic average calculated by the University to determine the applicant's relative academic competitiveness. The *admission average* is based upon at least four (4) completed *Grade 12 courses* as specified for the program to which they are applying.

*BC/Yukon Secondary School Applicant* shall mean an applicant following a secondary school program of study described and approved by the British Columbia Ministry of Education or the Department of Education of the Government of Yukon.

*BC/Yukon Secondary School Curriculum* shall mean a secondary school program of study described and approved by the British Columbia Ministry of Education or the Department of Education of the Government of Yukon.

*Broad-Based Admission* shall mean the consideration of non-academic and academic information (beyond the *admission average* and pre-requisite courses) in undergraduate admission decisions.

*Course Grade* shall mean the school-issued percentage grade for a course.

*Examination Grade* shall mean the percentage grade result of the provincial examination.

*Direct-entry Undergraduate Program* shall mean a course of study offered by the University leading to a degree to which applicants are generally admitted based primarily upon either their secondary school academic performance or transfer from a comparable program at another post-secondary institution.

*Extra-Provincial Curriculum* or *Extra-Provincial Curricula* shall mean any Canadian secondary school system not following the BC/Yukon Secondary School Curriculum.

*Final Course Grade* shall mean the grade issued after the completion of the course. In the case of English 12/English 12 First Peoples, the final grade consists of a 60% weighting on the school-assigned course grade and 40% on the results of a mandatory provincial examination.

*Grade 11 Course* shall mean a course designated by the British Columbia Ministry of Education or the Department of Education of the Government of Yukon to be at the Grade 11 academic level.

*Grade 12 Course* shall mean a course designated by the British Columbia Ministry of Education or the Department of Education of the Government of Yukon to be at the Grade 12 academic level and on the list of approved courses for consideration in calculating an *admission average*.

*Interim Admission Average* shall mean an *admission average* that includes one or more *interim course grades* for *Grade 12 courses* or one or more *final course grades* for *Grade 11 course* equivalents under this policy.

*Interim Course Grade* shall mean the grade issued for a course that is still in progress at the time of UBC's academic assessment, provided that such a grade is issued after at least 50% of the course material is complete and evaluated.

**Policy:**

1. Academic criteria, generally as indicated by a calculated *admission average* and the completion of pre-requisite courses, are the primary basis for determining admissibility to *direct-entry undergraduate programs*; however, with the approval of Senate, Faculties and programs may elect to use *Broad-Based Admission* or other criteria to select from applicants whose *admission average* meets or exceeds Faculty or program thresholds for admission which may vary from year to year.
2. An *admission average* or *interim admission average* will be calculated where all *Grade 12 courses* required for admission have been completed or are in-progress and all required verifiable or official *final* or *interim course grades* are available to the University.

3. *Admissions averages* or *interim admission averages* shall be based on at least four (4) *Grade 12 courses* (or the *Grade 11 course* equivalents under this policy) as specified for the program.
4. Where available, *final* or *interim course grades* for *Grade 12 courses* shall be used in calculating an *admission average* or an *interim admission average*; however, notwithstanding 2. above, should one or more of the required *Grade 12 courses* not have a *final* or *interim course grade* at the time of academic assessment, the *final course grade* for one or more appropriate *Grade 11 courses* will be substituted into the calculation of the *interim admission average* as follows:
  - a. for specified *Grade 12 courses* (English 12/English 12 First Peoples for all programs, or prerequisite Mathematics or Science courses for some programs), a *final course grade* for a *Grade 11* course in the same subject-area shall be substituted; and,
  - b. for other *Grade 12 courses*, a *final course grade* for a *Grade 11* course may be substituted so long as the course meets the criteria for inclusion as a secondary school course in an *admission average* but is at the *Grade 11 level*, and is not in a subject area that is already being used in the calculation of the *admissions average*.
5. *Grade 11 courses* that may be substituted for *Grade 12 courses* shall be set out in the procedures to this policy by the *responsible committee*.
6. Offers of admission based on *interim admission averages* that include one or more *final course grades* for *Grade 11 courses* and/or *interim course grades* for *Grade 12 courses* are conditional subject to the satisfactory completion of all required courses and the meeting of any requirements referenced in the letter of admission. Failure to meet any of the requirements referenced in the letter of admission may result in the withdrawal of the offer of admission.
7. Conditions required to retain an offer of admission will be determined by individual Faculties on a year-to-year basis, and Faculty thresholds may be higher than the published University minima.
8. Offers of admission for applicants who fail to meet the referenced conditions will be reviewed by the admitting Faculty on a case-by-case basis.
9. When English 12/English 12 First Peoples is in progress at the point of evaluation, an *interim course grade* shall be used in the calculation of the *interim admission average*.
10. When English 12/English 12 First Peoples has been completed at point of evaluation, the *admission average* or *interim admission average* is calculated on whichever is the higher of the English 12/English 12 First Peoples *final grade* (weighted 60% *course grade* and 40% *examination grade*) or *course grade* alone.
11. In cases where a significant discrepancy exists between the English 12/English 12 First Peoples *course grade* and the *examination grade*, the University reserves the right to use the *examination grade* only. A significant discrepancy

is determined by a difference of no less than 20% between the English 12/English 12 First Peoples *course grade* and the *examination grade*.

12. The *responsible committee* shall set out the timing for admission decisions for admission to *direct-entry undergraduate programs* as a procedure to this policy.

**Academic Calendar Statements:**

<p><b>Faculty/School:</b> N/A  <b>Department/Unit:</b> Enrolment Services  <b>Faculty/School Approval Date:</b> N/A  <b>Effective Session:</b> 2013W (Effective immediately. To be published in the Academic Calendar upon approval for the purpose of informing prospective students.)</p>	<p><b>Date:</b> November 2013  <b>Contact Person:</b> Andrew Arida, Associate Registrar, Undergraduate Admissions  <b>Phone:</b> 604.822.2890  <b>Email:</b> <a href="mailto:andrew.arida@ubc.ca">andrew.arida@ubc.ca</a></p>
<p><b>Proposed Academic Calendar Entry:</b>  <a href="#">Homepage (draft) Admissions Applicants Following the BC/Yukon High School Curriculum</a> Admission Requirements</p> <p><b>Admission Requirements</b></p> <p>[...]</p> <p><b>[95]</b> The admission average will be calculated on English 12 or English 12 First Peoples and the three additional UBC Okanagan campus-approved Grade 12 courses from the table below, or the equivalents. <b><u>Should final or in-progress Grade 12 grades not be available at the time of evaluation, final Grade 11 grades may be used as appropriate.</u></b></p> <p>[...]</p>	<p><b>Draft Academic Calendar URL:</b>  <a href="http://www.calendar.ubc.ca/okanagan/pr_oof/edit/index.cfm?tree=2,22,63,0">http://www.calendar.ubc.ca/okanagan/pr_oof/edit/index.cfm?tree=2,22,63,0</a></p> <p><b>Present Academic Calendar Entry:</b>  <a href="#">Homepage (draft) Admissions Applicants Following the BC/Yukon High School Curriculum</a> Admission Requirements</p> <p><b>Admission Requirements</b></p> <p>[...]</p> <p><b>[95]</b> The admission average will be calculated on English 12 or English 12 First Peoples and the three additional UBC Okanagan campus-approved Grade 12 courses from the table below, or the equivalents.</p> <p>[...]</p>

<p><b>[15642]</b> Applicants are required to write the final examinations offered by the BC Ministry of Education (BC Provincial Examinations) that are required for graduation. For admission decisions, BC Provincial Examination results will be used if the examination result increases the applicant's admission average.</p> <p><b><u>However, in cases where a significant discrepancy exists between the course grade and the examination grade, UBC reserves the right to use the examination grade only.</u></b></p>	<p><b>[15642]</b> Applicants are required to write the final examinations offered by the BC Ministry of Education (BC Provincial Examinations) that are required for graduation. For admission decisions, BC Provincial Examination results will be used if the examination result increases the applicant's admission average.</p>
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### **Consultations:**

Extensive consultation was undertaken within and outside of UBC, which included over 300 secondary school counselors from secondary schools on Vancouver Island, in the Lower Mainland and in the Okanagan, Enrolment Services, Undergraduate Admissions, UBC Vancouver and Okanagan Deans.

### **History:**

#### The use of Grade 11 grades in calculating the *admission average*

Up until 1992, the University used both *Grade 11* and *Grade 12 course* grades to render admission decisions for *BC/Yukon Secondary School Applicants*. Following the lead of a number of other Canadian universities (UBC Senate Minutes, April 22, 1992), Senate approved a revision of requirements for *BC/Yukon Secondary School Applicants* so that the *admission average* would be based solely upon grades in four *Grade 12 courses*.

In 2009, again following the lead of other Canadian universities, the UBC Vancouver and Okanagan Senate approved a pilot project that allowed the substitution of a *final course grade* for a *Grade 11 course* for an unavailable *interim course grade* for a *Grade 12 course* for secondary school applicants following Canadian *Extra-Provincial Curricula*. In 2011, the outcomes of the pilot project were reviewed and it was determined that there were not any significant differences in first-year performance between the students admitted on (a) *final course grade(s)* for *Grade 11 course(s)* and *final course grades* for *Grade 12 courses*, and (b) those admitted on *interim* and *final course grades* for *Grade 12 courses* only. As a result, policy J-51 was approved, allowing for the ongoing use of *final course grades* for *Grade 11 courses* for secondary school

applicants from Canadian jurisdictions outside of BC when an *interim course grade* for a *Grade 12 course* is not yet available.

In March 2012, Policy J-52 was approved, allowing the use of BC secondary school *final course grades* for *Grade 11 courses* as substitutes for missing *interim course grades* for *Grade 12 courses*. Policy J-52 was put in place as a short-term measure to address issues related to *BC/Yukon Secondary School Applicants'* grade collection in light of the job action initiated by the BC Teachers' Federation.

While Policy J-52 was reviewed by the Senate Admissions Committee and deemed appropriate for the extraordinary circumstances in which it was created, it was seen as insufficient as a long-term policy. As such, policy J-52 was discontinued at the 19 September 2012 Vancouver Senate, and will be considered for discontinuance by the Okanagan Senate with the promise of a forthcoming policy that will be more appropriate and comprehensive over the long-term.

The use of English 12/English 12 First Peoples provincial examination results in the calculation of undergraduate *admission average*.

Up until 2008, if a BC secondary school applicant had already completed English 12 English/12 First Peoples at the point of evaluation for undergraduate admission, the University always used the *final course grade* (composed of 60% school-assigned course grade and 40% provincial examination score) in the calculation of the *admission average*.

In March 2008, the UBC Okanagan Senate decided that the policy requiring *BC/Yukon Secondary School Applicants* to write optional provincial examinations be discontinued. A similar decision was also reached by the UBC Vancouver Senate in May of the same year. Going forward, in cases where a *BC/Yukon Secondary School Applicant* had already completed an optional Grade 12 examination, the *final course grade* (including the examination grade) would be incorporated in the *admission average* in March/April, but only if advantageous to the applicant. Otherwise, the *admission average* would now be calculated on the *course grade* only and the *examination grades* were discarded.

The policy was silent on whether the same principle should apply when the provincial examination remained mandatory (as in the case of English 12/English 12 First Peoples). In the spirit of Senate's decision, it was decided that in practice, the *examination grade* in English 12/English 12 First Peoples would only be incorporated into the *admission average* if it proved beneficial to the applicant.

### **Related Policies:**

J-51: *Admission Based on Interim Grades for Applicants following Canadian Extra-Provincial Curricula*



**Appendix:**

N/A

**Procedures:****Part 1: Calculation of *Interim Admission Averages***

1. The calculation of an *interim admission average* shall be based on the following, with course-by-course substitutions outlined below:
  - the *BC/ Yukon Secondary School Applicant* must have all required courses either in progress, completed, or anticipated to be complete by the end of their ultimate year of secondary school;
  - if one or more of the required or elective *Grade 12 courses* does not yet have a *final* or *interim course grade* then (a) *final course grade(s)* for a *Grade 11 course* shall be substituted into the *admission average* as follows:
    - for required *Grade 12 courses* (English or a prerequisite Mathematics or Science course), only a *final course grade* in a *Grade 11 course* in the same subject-area (i.e., a course that is directly laddered to the *Grade 12 course*) shall be substituted;
    - for elective *Grade 12 courses* (i.e., a course that is UBC-approved as it meets the “Criteria for Including Secondary School Courses in an Admission Average”), a *final course grade* for a *Grade 11 course* may be substituted so long as the course is a) not in a subject area that has already been included at the Grade 12 level (e.g., Biology 12 already included, do not include Biology 11), and b) meets the UBC-approved criteria but is at the Grade 11 level.
2. The calculation of an *admission average* or an *interim admission average* shall be based on the following, with the use of the English 12/English 12 First Peoples examination grade incorporated as outlined below:
  - if the *BC/ Yukon Secondary School Applicant* presents an *interim course grade* for English 12/English 12 First Peoples, the *course grade* is used in the calculation of the *interim admission average*;
  - if the *BC/ Yukon Secondary School Applicant* has already completed English 12/English 12 First Peoples at point of evaluation, *examination grades* will be used if the *examination grade* increases the applicant's *admission average* or *interim admission average*;
  - in cases where a significant discrepancy exists between the English 12/English 12 First Peoples *course grade* and the *examination grade*, UBC reserves the right to use the *examination grade* only. A significant discrepancy is determined by a difference of no less than 20% between the English 12/ English 12 First Peoples *course grade* and the *examination grade*.

- in all cases, a *BC/Yukon Secondary School Applicant's admission average* or *interim admission average* will be optimized such that the highest possible average is calculated while adhering to the rules outlined above.

## **Part 2: Timing of Admission Decisions**

1. The University will make initial admission decisions for *direct-entry undergraduate programs* based upon data that is available /verifiable as of 1 April each year for the following Winter Session; the *admission average* used for these decisions will be made based upon *final* or *interim course grades* for *Grade 12 courses*(or equivalent *final course grades* for *Grade 11 courses*).
2. An additional round of admission decisions for *BC/Yukon Secondary School applicants* may be made based upon data that is available as of 15 May each year if it is anticipated that space will remain in the program to which the applicant has applied. The *admission average* used for these decisions will be made based upon *final* or *interim courses* for *Grade 12 courses* only.
3. Once a complete set of *final course grades* for *Grade 12 courses* becomes available (usually in the summer), an additional round of admission decisions for *BC/Yukon Secondary School Applicants* may be made if it is anticipated that space will remain in the program to which the applicant has applied.
4. Once a complete set of *final course grades* for *Grade 12 courses* becomes available (usually in the summer), *BC/ Yukon Secondary School Applicants* who have already been admitted based upon an *interim admission average* will be evaluated to determine if all the conditions of admission (as referenced on the admission letter) have been met.
5. In all instances, if the *BC/ Yukon Secondary School Applicant* has already completed the English 12/English 12 First Peoples BC Provincial Examination, the results will be used as outlined above.

### Part 3: Grade 11 Grade Substitutions

#### Specific substitutions Viable grade 11 courses

<b>BC/Yukon secondary school curriculum Grade 12 courses that may be used on the calculation of the admission average</b>	<b>BC/Yukon curriculum Grade 11 courses that may be used as a substitute</b>
American Sign Language (ASL) 12	American Sign Language (ASL) 11
Arabic 12	Arabic 11
BC First Nations Studies 12	BC First Nations Studies 11
Biology 12 <sup>1</sup>	Biology 11
Calculus 12	N/A <sup>3</sup>
Chemistry 12 <sup>1</sup>	Chemistry 11
Computer Information Systems 12	Computer Information Systems 11
Computer Programming 12	Computer Programming 11
Croatian 12	Croatian 11
Economics 12	N/A <sup>3</sup>
English Literature 12	English Literature 11
English 12 <sup>1</sup> or English 12 First Peoples <sup>1</sup> (but not both)	English 11 or English 11 First Peoples (but not both)
Français Langue 12 or French 12 (but not both)	Français Langue 11 or French 11 (but not both)
Geography 12	Social Studies 11 <sup>3</sup>
Geology 12 <sup>1</sup>	Earth Science 11
German 12	German 11
Halq'eméylem 12	Halq'eméylem 11
Heiltsuk 12	Heiltsuk 11
History 12	Social Studies 11 <sup>3</sup>
Hul'q'umi'num' 12	Hul'q'umi'num' 11
Italian 12	Italian 11
Japanese 12	Japanese 11
Korean 12	Korean 11
Kwak'wala 12	Kwak'wala 11
Law 12	N/A <sup>3</sup>
Liqwala/Kwakwala 12	Liqwala/Kwakwala 11
Mandarin 12	Mandarin 11
nsíylxcən (Okanagan Language) 12	nsíylxcən (Okanagan Language) 11
Nte?kepmxcin 12	Nte?kepmxcin 11
Nuu-chah-nulth 12	Nuu-chah-nulth 11
Principles of Mathematics 12 or Pre-Calculus 12 <sup>1</sup>	Principles of Mathematics 12 or Pre-Calculus 11
Physics 12 <sup>1</sup>	Physics 11
Punjabi 12	Punjabi 11
Russian 12	Russian 11

Secwepemctsin (Shuswap Language) 12	Secwepemctsin (Shuswap Language) 11
Shashishalhem (Sechelt Language) 12	Shashishalhem (Sechelt Language) 11
Sim'algaxhl Nisga'a 12	Sim'algaxhl Nisga'a 11
Sm'algyax 12	Sm'algyax 11
Social Justice 12	N/A <sup>3</sup>
Spanish 12	Spanish 11
Sustainable Resources 12	Sustainable Resources 11
Tsek'ene 12	Tsek'ene 11
Upper St'at'imcets 12	Upper St'at'imcets 11

## Notes:

1. Indicates a pre-requisite course used by one or more direct-entry Faculties.
2. Social Studies 11 may not be double-counted if both Geography 12 and History 12 are in progress.
3. Course does not have a Grade 11 equivalent.

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**December 19, 2012**

**To: Okanagan Senate**

**From: Admissions and Awards Committee**

**Subject: New and Revised Awards (approval)**

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The Admissions and Awards Committee is pleased to recommend the following:

*Motion: That Senate accept the new and revised awards as listed and forward them to the Board of Governors for approval; and that a letter of thanks be sent to the donors.*

**Randall and Claudia Findlay Bursary in Engineering**

One or more bursaries totalling \$4,375 are offered by Randall and Claudia Findlay to students in the School of Engineering in the Faculty of Applied Science at the University of British Columbia, Okanagan campus. (First awards available for the 2013/14 Winter Session)

**Yawney Family Varsity Athletics Award**

Awards totalling \$1,000 are offered by Michael Yawney and family to one or more varsity athletes at the University of British Columbia, Okanagan campus entering first year, with preference given to those who have graduated from a high school in School District 22 (Vernon) or School District 83 (North Okanagan Shuswap). Adhering to athletic association regulations, awards are made on the recommendation of the Athletics & Recreation Department to outstanding students who have demonstrated leadership skills and maintained good academic standing. (First awards available for the 2012/13 Winter Session)

Previously-approved awards with changes in terms or funding source:

Proposed:

**Craig Hall Memorial Visual Arts Scholarship in Printmaking**

A \$1,000 scholarship is offered by Briar Craig in memory of James and Phyllis Craig (nee Hall) to a student entering third or fourth year who is specializing in printmaking in the Visual Arts Program in the Faculty of Creative and Critical Studies at the University of British Columbia, Okanagan campus. James and Phyllis steadfastly supported the study of visual arts, and printmaking in particular. The award is made on the recommendation of the Faculty. (First award available for the 2012/13 Winter Session)

Current:

**Craig Hall Memorial Visual Arts Scholarship in Printmaking**

A \$1,000 scholarship is offered by Briar Craig to a student in third or fourth year who is specializing in printmaking in the Visual Arts Program in the Faculty of Creative and Critical Studies at the University of British Columbia Okanagan. The award is made on the recommendation of the Faculty. (First award available for the 2008/09 Winter Session)

How Amended:

This award description has been revised to honour the memory of the donor's parents who passed away after the award was established. References to his parents have been added to the first and second sentences, and the donor has also asked that we specify that the award is for a student "entering" third or fourth year.

For the Committee

Dr. Spiro Yannacopoulos

Chair, Admissions and Awards Committee

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**December 19, 2012**

**To: Okanagan Senate**

**From: Admissions and Awards Committee**

**Subject: Major Entrance Scholarships (MES) (approval)**

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The Admissions and Awards Committee is pleased to recommend the following:

*Motion: That Senate accept the Major Entrance Scholarships (MES) award as described below and forward it to the Board of Governors for approval;*

*and*

*That Senate discontinue the Community Builders Scholarships award and forward notice of this discontinuance to the Board of Governors for approval, with such discontinuance to be effective upon the date of approval of the Major Entrance Scholarships award.*

**Summary**

Replace existing Community Builders Scholarships with two-year Major Entrance Scholarships and repackage awards for domestic undergraduate students into a general category identified as Major Entrance Scholarships.

**Background**

At its inception, the UBC Okanagan campus introduced two scholarship initiatives aimed at recruiting top students who would assist in creating the foundation for the evolving on-campus leadership program. Eight (8) Major Entrance Scholarships and thirty-three (33) Community Builders Scholarships were introduced for students entering UBC directly

from high school; criteria included high academic achievement and the ability to lead in at least one of the following: artistic endeavours, original intellectual pursuits, community service, athletics, or school activities.

In subsequent years, two awards were established for Aboriginal students: one for students entering UBC directly from high school and the other for transfer students entering UBC from another post-secondary institution. In addition, the Community Builders Scholarships were expanded to include national awards for students from high schools across Canada.

## **Current Awards for Entering and Transferring Students**

### Major Entrance Scholarship

Two awards of \$10,000, renewable for three years, to students originating directly from a high school.

### National Entrance Scholarship

Six awards of \$7,500, renewable for three years, to students originating directly from a high school (1 British Columbia; 1 Alberta; 1 Ontario; 2 national; 1 national outside British Columbia).

### Aboriginal Entrance Scholarship

One award of \$7,500, renewable for three years, to an Aboriginal student admitted directly from high school.

### Aboriginal Transfer Scholarship

One award of \$5,000, renewable for two years, to an Aboriginal student admitted on the basis of post-secondary credit.

### Community Builder Scholarships

Non-renewable awards of \$3,500 disbursed to domestic students entering directly from high school. Up to 33 awards granted to students from British Columbia and up to 45 to students from across Canada

## **Proposal**

### Major Entrance Scholarships (MES)

1. Replace the 78 existing \$3,500 one-time Community Builders Scholarships with 29 scholarships of \$5,000, renewable for one year.
2. Rename the 29 proposed awards, together with, the existing Major Entrance Scholarships, the National Entrance Scholarship, the Aboriginal Entrance



Scholarship, and the Aboriginal Transfer Scholarship (retained at the same numbers of granted awards) as Major Entrance Scholarships with the following description:

*“The University of British Columbia offers Major Entrance Scholarships to outstanding domestic students entering university directly from high school or transferring from another post-secondary institution. Criteria for these awards includes: scholarly achievement in combination with contributions to community and demonstrated leadership qualities. Subject to continued scholarship standing, the awards are renewable for further years of study or until the first undergraduate degree is obtained (whichever is the shorter period). Specific awards are:*

- *Awards of \$10,000 for students entering directly from a senior secondary school. Renewable for up to three years.*
- *Awards of \$7,500 for students entering directly from a senior secondary school outside of British Columbia. Renewable for up to three years.*
- *Awards of \$7,500 for students entering directly from a senior secondary school in British Columbia. Renewable for up to three years.*
- *Awards of \$7,500 to Aboriginal students entering directly from a senior secondary school. Renewable for up to three years.*
- *Awards of \$5,000 for Canadian Aboriginal students entering UBC as a transfer student from a recognized post-secondary institution. Renewable for up to two years.*
- ***Awards of \$5,000 for students entering directly from a senior secondary school. Renewable for one year [former Community Builder Scholarships].”***

The proposed two-year MES award continues to support the goal of enrolling a geographically diverse student population. Since it is also renewable for a second year, it will encourage student retention at the critical point into second year enrolment. The Community Builder Scholarship to be replaced was at times difficult to award since it was dependent on receiving recommendations from high school administrators. Recommendations were not always received by UBC, thus leaving awards unclaimed.

Combining all these awards under the Major Entrance Scholarship title will clarify communication to students, parents, and high school counselors.

For the Committee  
Dr. Spiro Yannacopoulos  
Chair, Admissions and Awards Committee

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**December 19, 2012**

**To: Okanagan Senate**

**From: Curriculum Committee**

**Subject: December Curriculum Proposals (approval)**

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The Curriculum Committee has reviewed the material forwarded to it by the Faculties and encloses those proposals it deems ready for approval.

As such, the following is recommended to Senate:

***Motion: That Senate approve the new course, and the new and revised programs, brought forward from the Faculties of Arts and Sciences, Education, and Health and Social Development as set out in the attached proposals.***

For the Committee,  
Dr. Dwayne Tannant  
Chair, Curriculum Committee

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**December 19, 2012**

**To: Okanagan Senate**  
**From: Curriculum Committee**  
**Subject: December Curriculum Proposals (approval)**

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Enclosed please find the following for your consideration:

**From the Faculty of Arts and Sciences**

1. The following new program:
  - a. B.A. Computer Science Honours Program

**From the Faculty of Education**

2. The following new course:
  - a. EDUC 104 (3) Introduction to Academic Pedagogy: An Aboriginal Perspective

**From the Faculty of Health and Social Development**

3. The following revised program:
  - a. Bachelor of Human Kinetics



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## Curriculum Proposal Form New Program – Okanagan Campus

### Category: 1

<p><b>Faculty:</b> Arts and Sciences <b>Unit:</b> Unit 5 <b>Faculty Approval Date:</b> October 23, 2012 <b>Effective Session:</b> 2012W</p>	<p><b>Date:</b> August 1, 2012 <b>Contact Person:</b> Ramon Lawrence <b>Phone:</b> 250.807.9390 <b>Email:</b> <a href="mailto:ramon.lawrence@ubc.ca">ramon.lawrence@ubc.ca</a></p>
<p><b>Proposed Academic Calendar Entry:</b> <a href="#">Homepage (draft) Faculties, Schools, and Colleges Faculty of Arts and Sciences Bachelor of Arts Programs</a> Computer Science (B.A.)</p> <p><b>Computer Science (B.A.)</b></p> <p><b>[14718] B.A. Major in Computer Science</b></p> <p><b>[14721] Note:</b> The UBC Okanagan campus also offers a <a href="#">B.Sc. Major in Computer Science</a>.</p> <p><b>[14719]</b> This program provides students with an opportunity to complement their Arts degree with a core of Computer Science courses specific to their interests. This program would appeal to students interested both in computer science and visual arts (game or website design), psychology (programming for cognitive science, psychology, and human and computer interactions), English (technical writing), languages (automation of text translation), philosophy (computer ethics), or law (information security and privacy,</p>	<p><b>Draft Academic Calendar URL:</b> <a href="http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,282,857,1260">http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,282,857,1260</a></p> <p><b>Present Academic Calendar Entry:</b> <a href="#">Homepage (draft) Faculties, Schools, and Colleges Faculty of Arts and Sciences Bachelor of Arts Programs</a> Computer Science (B.A.)</p> <p><b>Computer Science (B.A.)</b></p> <p><b>[14718] B.A. Major in Computer Science</b></p> <p><b>[14721] Note:</b> The UBC Okanagan campus also offers a <a href="#">B.Sc. Major in Computer Science</a>.</p> <p><b>[14719]</b> This program provides students with an opportunity to complement their Arts degree with a core of Computer Science courses specific to their interests. This program would appeal to students interested both in computer science and visual arts (game or website design), psychology (programming for cognitive science, psychology, and human and computer interactions), English (technical writing), languages (automation of text translation), philosophy (computer ethics), or law (information security and privacy,</p>

<p>and forensics).</p> <p><b>[14722] First and Second Years</b></p> <p><b>[14723] <u>B.A. requirements</u></b>, including the following:</p> <p><b>[14724]</b></p> <ul style="list-style-type: none"> <li>• one of COSC 111, COSC 123<sup>1</sup>;</li> <li>• COSC 121;</li> <li>• COSC 211, COSC 221<sup>2</sup>, COSC 222;</li> <li>• one of MATH 100, MATH 116;</li> <li>• one of MATH 101, MATH 142;</li> <li>• MATH 221<sup>3</sup>.</li> </ul> <p><b>[14725]</b> <sup>1</sup>COSC 122 is a prerequisite for COSC 123.  <sup>2</sup>Or its equivalent, MATH 251.  <sup>3</sup>MATH 200 and STAT 230 are strongly recommended.</p> <p><b>[14726] Third and Fourth Years</b></p> <p><b>[14727]</b></p> <ul style="list-style-type: none"> <li>• 30 credits of Computer Science courses numbered 300 or above;</li> <li>• PHIL 331;</li> <li>• 15 credits at the 300/400 level outside of Computer Science.</li> </ul> <p><b><u>B.A. Computer Science Honours Program</u></b></p> <p><b><u>Through coursework and research, the Honours in Computer Science is an intensive program of study. Students who complete this program will have the ability to work independently and with a high level of competency. The course requirements are the same as in the Major in Computer Science program, except the student must maintain a high grade level (a minimum of 75%) and the student must complete COSC 449</u></b></p>	<p>and forensics).</p> <p><b>[14722] First and Second Years</b></p> <p><b>[14723] <u>B.A. requirements</u></b>, including the following:</p> <p><b>[14724]</b></p> <ul style="list-style-type: none"> <li>• one of COSC 111, COSC 123<sup>1</sup>;</li> <li>• COSC 121;</li> <li>• COSC 211, COSC 221<sup>2</sup>, COSC 222;</li> <li>• one of MATH 100, MATH 116;</li> <li>• one of MATH 101, MATH 142;</li> <li>• MATH 221<sup>3</sup>.</li> </ul> <p><b>[14725]</b> <sup>1</sup>COSC 122 is a prerequisite for COSC 123.  <sup>2</sup>Or its equivalent, MATH 251.  <sup>3</sup>MATH 200 and STAT 230 are strongly recommended.</p> <p><b>[14726] Third and Fourth Years</b></p> <p><b>[14727]</b></p> <ul style="list-style-type: none"> <li>• 30 credits of Computer Science courses numbered 300 or above;</li> <li>• PHIL 331;</li> <li>• 15 credits at the 300/400 level outside of Computer Science.</li> </ul>
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<p><b><u>Honours Thesis (6 credits).</u></b></p> <p><b><u>Admission Requirements</u></b></p> <ul style="list-style-type: none"> <li>• <b><u>Fourth-year standing in the Computer Science Major;</u></b></li> <li>• <b><u>This program requires a research project with an undergraduate honours thesis. The thesis proposal and a research supervisor must be approved by the unit head; and</u></b></li> <li>• <b><u>Minimum grade average of 75% in all courses taken to date applicable to the Computer Science Major.</u></b></li> </ul> <p><b><u>In exceptional cases, such as transferees from another institution, a student may be admitted to the Honours program notwithstanding the criteria listed above.</u></b></p> <p><b><u>Graduation Requirements</u></b></p> <ul style="list-style-type: none"> <li>• <b><u>Completion of the course requirements for the Computer Science Major;</u></b></li> <li>• <b><u>Completion of COSC 449 Honours Thesis with a minimum grade of 75%. A written thesis is required, with a public presentation of the thesis in the form of a poster session and/or a seminar; and</u></b></li> <li>• <b><u>A minimum 75% graduating grade average (GGA).</u></b></li> </ul>	<p><b>Type of Action:</b> Add an honours program option to the B.A. in Computer Science.</p> <p><b>Rationale:</b> Currently students majoring in Computer Science from the B.A. program cannot switch to an Honours program. Several of the students who started in the B.A. and wished to do an Honours program had to transfer to the B.Sc. Program.</p> <p>This new proposed program mirrors the B.Sc. Major in Computer Science Honours Program, see:  <a href="http://www.calendar.ubc.ca/okanaganindex.cfm?tree=18,282,858,993">http://www.calendar.ubc.ca/okanaganindex.cfm?tree=18,282,858,993</a></p>
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## Curriculum Proposal Form New Course – Okanagan Campus

### Category: 1

<p><b>Faculty:</b> Education <b>Department/Unit:</b> N/A <b>Faculty Approval Date:</b> May 16, 2012 <b>Effective Session:</b> 2012W</p>	<p><b>Date:</b> March 18, 2012 <b>Contact Person:</b> Dr. Karen Ragoonaden <b>Phone:</b> 250.807.8113 <b>Email:</b> <a href="mailto:karen.ragoonaden@ubc.ca">karen.ragoonaden@ubc.ca</a></p>
<p><b>Proposed Academic Calendar Entry:</b></p> <p><b><u>EDUC 104 (3) Introduction to Academic Pedagogy: An Aboriginal Perspective</u></b> <b><u>Using an Aboriginal approach to the cycle of learning, this developmental course provides an opportunity for first year students to learn essential skills needed for academic success. [3-0-0]</u></b></p>	<p><b>Draft Academic Calendar URL:</b> N/A</p> <p><b>Present Academic Calendar Entry:</b> N/A</p> <p><b>Type of Action:</b> New course.</p> <p><b>Rationale:</b> This course was developed in collaboration with Aboriginal Programs and Services to address the unique needs and obstacles facing Aboriginal Access Studies students. It fulfills goals for Aboriginal engagement set out in the Place and Promise Plan for UBC.</p> <p>Note: Registration will be restricted to students in the Access Studies program.</p> <p>Using the Aboriginal Wheel of Teaching and Learning, this developmental course provides an opportunity for first-year Aboriginal Access Studies students to learn essential skills needed for academic success. It is designed to investigate key</p>

	<p>aspects of knowledge building and effective critical strategies related to academic pedagogy. The topics covered are communication skills, study techniques, time management/planning, critical thinking, diversity issues, community and campus resources, library skills, multimedia resources, and student responsibilities. Through praxis oriented instructional methods, students will investigate foundational skills relating to educational goals, strengths, and areas for development. Due to the interactive nature of this course, a variety of instructional strategies will be used including, but not limited to: lecture, group discussion, group activities, video tapes, guest speakers and exploration activities.</p> <p>The following courses have previously been approved under this model:</p> <p><b>BIOL 104 (3) Concepts of Biology: An Aboriginal Perspective</b>  Introduction to core biology concepts employing an Aboriginal perspective of cyclical analysis and synthesis. Scientific method, energy acquisition, cell structure and function, genetics, evolution and diversity. Cannot be counted for credit toward the B.Sc. degree. [3-3-0]  <i>Prerequisite:</i> Biology 11 or permission of the instructor.</p> <p><b>ENGL 114 (3) University Writing: Aboriginal Perspectives</b>  Study and practice of the principles of university-level discourse in relation to aboriginal perspectives, with emphasis on processes of research-based writing. Essays and exercises are required. Credit will not be granted for both ENGL 114 and ENGL 112. [3-0-0]  <i>Prerequisite:</i> Students must have</p>
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	<p>one of a) 70% in Grade 12 English; b) a 5 on the LPI; c) a passing grade in the Okanagan campus' Writing 009; d) or an acceptable equivalent. For a list of equivalency options consult the Current Students website at <a href="http://www.ubc.ca/okanagan/students/registration/First-Year_English.html">http://www.ubc.ca/okanagan/students/registration/First-Year_English.html</a> .</p> <p><b>MATH 126 (3) Basic Mathematics: An Aboriginal Perspective</b></p> <p>Topics used in university courses: algebra, functions, graphs, basic geometry, trigonometry, exponential and logarithmic functions. Employs cyclical process of analysis and synthesis common to some Aboriginal cultures. Restricted to first-year students. Cannot be counted for credit toward the B.Sc. degree. Credit will not be granted for both MATH 126 and MATH 125. [3-0-1]</p> <p><i>Prerequisite:</i> Foundations of Mathematics 11.</p>
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## Curriculum Proposal Form Change to Program – Okanagan Campus

Category: 1

<p><b>Faculty:</b> Health and Social Development <b>School:</b> Health and Exercise Sciences <b>Faculty/School Approval Date:</b> November 14, 2012 2012 <b>Effective Session:</b> 2012W</p>	<p><b>Date:</b> November 2012 <b>Contact Person:</b> Dr. Paul van Donkelaar <b>Phone:</b> 250.807.8858 <b>Email:</b> <a href="mailto:paul.vandonkelaar@ubc.ca">paul.vandonkelaar@ubc.ca</a></p>
<p><b>Proposed Academic Calendar Entry:</b> <a href="#">Homepage (draft) Faculties, Schools, and Colleges School of Health and Exercise Sciences Bachelor of Human Kinetics Degree Requirements</a></p> <p><b>Degree Requirements</b></p> <p><b>[15802]</b> To qualify for the Bachelor of Human Kinetics (B.H.K.) degree, students must:</p> <p><b>[15803]</b></p> <ul style="list-style-type: none"> <li>• satisfy all the B.H.K. program requirements by completing studies whether at the UBC Okanagan campus or elsewhere;</li> <li>• satisfy at least 50% of the credits for the B.H.K. program while registered in the program<sup>1</sup>;</li> <li>• complete a minimum of 30 upper-level (300/400) credits in HMKN courses;</li> <li>• complete 48 <b>credits at the 300/400 level, of which 30 credits<sup>1</sup> must be completed at UBC</b>; and</li> <li>• complete 120 credits.</li> </ul>	<p><b>Draft Academic Calendar URL:</b> <a href="http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,346,1061,1287">http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,346,1061,1287</a></p> <p><b>Present Academic Calendar Entry:</b> <a href="#">Homepage (draft) Faculties, Schools, and Colleges School of Health and Exercise Sciences Bachelor of Human Kinetics Degree Requirements</a></p> <p><b>Degree Requirements</b></p> <p><b>[15802]</b> To qualify for the Bachelor of Human Kinetics (B.H.K.) degree, students must:</p> <p><b>[15803]</b></p> <ul style="list-style-type: none"> <li>• satisfy all the B.H.K. program requirements by completing studies whether at the UBC Okanagan campus or elsewhere;</li> <li>• satisfy at least 50% of the credits for the B.H.K. program while registered in the program<sup>1</sup>;</li> <li>• complete a minimum of 30 upper-level (300/400) credits in HMKN courses;</li> <li>• complete 48 <del>upper-division UBC Okanagan campus credits</del><sup>1</sup>; and</li> <li>• complete 120 credits.</li> </ul>

**Note: students may complete HMKN 401 (Community Placement Experience) or HMKN 499 (Project in Human Kinetics) while studying at another institution on a Senate-approved exchange program.**

**[15806]** Students must select one of two areas of concentration - Clinical Exercise Physiology or Health Promotion - and satisfy the course requirements of the area of concentration.

**[15804]** Students must also successfully complete the following credits:

**[15805]**

- ~~One of ENGL 112 (3) or ENGL 114 (3), ENGL 113 (3), ENGL 150 (3), ENGL 151 (3), ENGL 153 (3);~~
- ~~Health Studies core courses:
 
  - ~~HEAL 100 (3), HEAL 200 (3), HEAL 201 (3), HEAL 300 (3), HEAL 301 (3);~~~~
- ~~Human Kinetics core courses:
 
  - ~~HMKN 100 (3), HMKN 101 (3), HMKN 102 (3), HMKN 200 (3), HMKN 201 (3), HMKN 202 (3), HMKN 203 (3); one of HMKN 401 (3-9)<sup>2</sup>, HMKN 499 (3-9), HEAL 450 (3)<sup>2</sup>;~~~~
- ~~Human Kinetics concentration area required courses; and~~
- ~~electives.~~

**[15806]** Students must select one of two areas of concentration - Clinical Exercise Physiology or Community Health Promotion - and satisfy the course requirements of the area of concentration, as follows:

**[15807]**

- ~~concentration requirements: courses that are required by the area of concentration (9 credits);~~
- ~~Human Kinetics electives<sup>3</sup>: 12 credits of HMKN courses students elect to take; and~~
- ~~non-Human Kinetics electives<sup>3</sup>: courses taken in other disciplines~~

<p><b>[15808] Non-Human Kinetics Electives</b> Many 300/400-level courses require 100/200-level prerequisites, and therefore all non-HMKN electives should be selected carefully.</p> <p><b>[15809] Overloading</b> A student must apply in writing to the Faculty of Health and Social Development for permission to register in more than <b>36</b> credits in a Winter Session or 12 credits in a Summer Session.</p> <p><b>[15810]</b> <sup>1</sup>Courses taken while studying at another institution on a Senate-approved exchange program <b>may</b> satisfy this requirement.</p> <p><b>[15811] Areas of Concentration</b></p> <p><b>[15812] Clinical Exercise Physiology</b></p> <p><b>[15813]</b> This concentration focuses on <b><u>the role of exercise in health and physical activity in the prevention, rehabilitation, and management of chronic disease. Students will study a variety of aspects of healthy aging as well as cardiovascular, respiratory, neurophysiology and muscular physiology, and pathology. Potential occupations include: kinesiologist, clinical exercise physiologist, rehabilitation specialist, exercise therapist, and personal trainer, among others. Graduates of the clinical</u></b></p>	<p><del>or departments that students elect to take.</del></p> <p><b>[15808] Non-Human Kinetics Electives</b> Many 300/400-level courses require 100/200-level prerequisites, and therefore all non-HMKN electives should be selected carefully.</p> <p><b>[15809] Overloading</b> A student must apply in writing to the Faculty of Health and Social Development for permission to register in more than <b>33</b> credits <del>of work</del> in a Winter Session or 12 credits <del>of work</del> in a Summer Session.</p> <p><b>[15810]</b> <sup>1</sup>Courses taken while studying at another institution on a Senate-approved exchange program satisfy this requirement. <sup>2</sup><del>Students may take no more than 12 credits combined of HMKN 401, HMKN 499, or HEAL 450 as part of their Health Studies/Human Kinetics core courses; permission of the Undergraduate Chair required prior to registration.</del> <sup>3</sup><del>Some electives are more relevant to each concentration area, and electives should be chosen carefully to support career objectives.</del></p> <p><b>[15811] Areas of Concentration</b></p> <p><b>[15812] Clinical Exercise Physiology</b></p> <p><b>[15813]</b> This <del>area of</del> concentration focuses on <del>incorporating exercise and activity education and skills into patient rehabilitation and recovery programs from disease and injury, as well as for prevention and management of chronic diseases. Occupational titles include kinesiologist, exercise therapist, and personal trainer, among others. These individuals often work in conjunction with other health care providers such as physiotherapists, and work in hospitals, health centres, long-term care facilities,</del></p>
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<p><u>exercise physiology concentration often work in conjunction with other health care providers such as physicians, cardiac rehabilitation specialists, and nutritionists, and also progress into professions such as medicine, physiotherapy, respiratory therapy, and occupational therapy. Many of the courses offered in the other concentration, Health Promotion, also provide knowledge and skills beneficial to this area.</u></p>			<p><del>and other clinical settings.</del></p>		
<b>First Year</b>		<b>Credits</b>	<b>First Year</b>		<b>Credits</b>
3 credits of 100-level English		3	3 credits of 100-level English		3
<b><u>HEAL 200</u></b>	<b><u>Determinants of Health</u></b>	<b><u>3</u></b>	<b><u>HEAL 100</u></b>	<b><u>Introduction to Health Studies</u></b>	<b><u>3</u></b>
HMKN 100	Health, Fitness, and Lifestyle	3	HMKN 100	Health, Fitness, and Lifestyle	3
HMKN 101	Biomechanics	3	HMKN 101	Biomechanics	3
			<b><u>HMKN 102</u></b>	<b><u>Physical Activity in Canadian Society</u></b>	<b><u>3</u></b>
HMKN 190	Functional Anatomy and Applied Physiology I	3	HMKN 190	Functional Anatomy and Applied Physiology I	3
HMKN 191	Functional Anatomy and Applied Physiology II	3	HMKN 191	Functional Anatomy and Applied Physiology II	3
<b><u>HMKN 201</u></b>	<b><u>Exercise Psychology I</u></b>	<b><u>3</u></b>			
<b><u>9 credits of electives<sup>1</sup></u></b>		<b><u>9</u></b>	<b><u>Electives</u></b>		<b><u>9</u></b>
Total Credits		30	Total Credits		30

<b>Second Year</b>			<b>Second Year</b>		
HEAL 201	Canadian Health Care System	3	<del>HEAL 200</del>	<del>Determinants of Health</del>	<del>3</del>
HEAL 201	Canadian Health Care System	3	HEAL 201	Canadian Health Care System	3
HEAL 300	Methods of Data Analysis	3	HEAL 300	Methods of Data Analysis	3
HEAL 301	Health Research Methods	3	HEAL 301	Health Research Methods	3
HMKN 200	Exercise Physiology I	3	HMKN 200	Exercise Physiology I	3
HMKN 202	Human Motor Behaviour I	3	<del>HMKN 201</del>	<del>Exercise Psychology I</del>	<del>3</del>
HMKN 202	Human Motor Behaviour I	3	HMKN 202	Human Motor Behaviour I	3
HMKN 203	Lifespan Physical and Motor Development	3	HMKN 203	Lifespan Physical and Motor Development	3
<b><u>12 credits of electives<sup>1</sup></u></b>		<b><u>12</u></b>	Electives		<b>6</b>
Total Credits		30	Total Credits		30
<b>Third Year</b>			<b>Third Year</b>		
<b><u>3 credits of 300- or 400- level HMKN electives<sup>2</sup></u></b>		<b><u>3</u></b>	<del>BIOL 231</del>	<del>Health Science I</del>	<del>3</del>
HMKN 310	Exercise Physiology II	3	<del>BIOL 235</del>	<del>Health Science II</del>	<del>3</del>
HMKN 310	Exercise Physiology II	3	HMKN 310	Exercise Physiology II	3
HMKN 311	Exercise Prescription	3	HMKN 311	Exercise Prescription	3
HMKN 312	Laboratory Techniques in Exercise Science	3	HMKN 312	Laboratory Techniques in Exercise Science	3
<b><u>HMKN 335 Pathophysiology</u></b>		<b><u>3</u></b>			

<p><b><u>15 credits of electives</u></b><sup>1</sup> <span style="float: right;"><b><u>15</u></b></span></p> <p>Total Credits 30</p> <p style="text-align: center;"><b>Fourth Year</b></p> <p><b><u>3 credits of</u></b> Community Placement HMKN 401, HMKN 499<sup>3</sup> Experience, Project in Human Kinetics <span style="float: right;"><b>3</b></span></p> <p><b><u>12 credits of 300- or 400-level</u></b> HMKN electives<sup>2</sup> <span style="float: right;"><b><u>12</u></b></span></p> <p><b><u>15 credits of electives</u></b><sup>1</sup> <span style="float: right;"><b><u>15</u></b></span></p> <p>Total Credits 30</p> <p><b><u><sup>1</sup>Students in the Clinical Exercise Physiology concentration are required to complete a total of 51 credits of electives, of which 12 credits must be completed at the 300- or 400-level.</u></b></p> <p><b><u><sup>2</sup>A minimum of 15 credits of HMKN electives are required.</u></b> Required courses for the Health Promotion concentration are also eligible electives.</p> <p><b><u><sup>3</sup>Permission of the School of Health and Exercise Science is required. Students may take no more than 9 credits combined of HMKN 401 and HMKN 499.</u></b></p>	<p>HMKN Electives<sup>‡</sup> <span style="float: right;"><b>6</b></span></p> <p><del>Electives</del><sup>1</sup> <span style="float: right;"><b>9</b></span></p> <p>Total Credits 30</p> <p style="text-align: center;"><b>Fourth Year</b></p> <p><del>One of</del> Community Placement HMKN 401, HMKN 499, <del>HEAL 450</del> Experience, Project in Human Kinetics, <del>Health Studies Practicum</del> <span style="float: right;"><b>3</b></span></p> <p>HMKN Electives<sup>‡</sup> <span style="float: right;"><b>9</b></span></p> <p><del>Electives</del><sup>1</sup> <span style="float: right;"><b>18</b></span></p> <p>Total Credits 30</p> <p><del>‡</del> Required courses for the <del>Community Health Promotion</del> concentration are also eligible electives <del>and a minimum of 12 credits of HMKN electives are required.</del></p>
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<b>[15814] Health Promotion</b>		<b>[15814] Community Health Promotion</b>	
<p><u>[15815] This concentration examines health from a multidisciplinary perspective, including the physical, social-cultural, and psychological components of health, and the associated impact an individual's health has on the public health care system. This concentration teaches students how to promote a healthy lifestyle and improve many aspects of health throughout the lifespan using individual, community, and population level approaches. Health and exercise psychology, behavioural physical activity, health promotion, disease, health policy, health care systems, and nutrition are some of the topics included within this concentration. Potential occupations include: health services/policy worker, health promotion programmer, corporate/occupational health coordinator, active living coordinator, and social/health marketer, among others. These professionals work in a variety of health care and government organizations, and recreation and business centres in addition to schools. Many of the courses offered in the other concentration, Clinical Exercise Physiology, also provide knowledge and skills beneficial to this concentration.</u></p>		<p><del>[15815] This area of concentration takes a population approach to promoting active living and lifestyle management. Students and graduates will have opportunities to work in conjunction with other health professionals and community services and groups, to provide a holistic approach to health. This area of study is aimed at improving population health and reducing the reliance on the health care system. The promotion of active living throughout the lifespan, particularly in youth and senior populations, is a focus and priority. Occupational titles here include health promotion program officer, lifestyle coach, and active living coordinator, among others.</del></p>	
<b>First Year</b>	<b>Credits</b>	<b>First Year</b>	<b>Credits</b>
3 credits of 100-level English	<u>3</u>	3 credits of 100-level English	
<u><b>HEAL 200</b></u>	<u><b>Determinants of Health</b></u>	<del><b>HEAL 100</b></del>	<b>Introduction to Health Studies</b>
	<u>3</u>		<b>3</b>
HMKN 100	Health, Fitness, and Lifestyle	HMKN 100	Health, Fitness, and Lifestyle
	3		3



HMKN 101	Biomechanics	3	HMKN 101	Biomechanics	3
			<del>HMKN 102</del>	<del>Physical Activity in Canadian Society</del>	<del>3</del>
HMKN 190	Functional Anatomy and Applied Physiology I	3	HMKN 190	Functional Anatomy and Applied Physiology I	3
HMKN 191	Functional Anatomy and Applied Physiology II	3	HMKN 191	Functional Anatomy and Applied Physiology II	3
<u>HMKN 201</u>	<u>Exercise Psychology</u>	<u>3</u>			
<u>9 credits of 100- or 200-level electives<sup>1</sup></u>		9	Electives		9
Total Credits		30	Total Credits		30
<b>Second Year</b>			<b>Second Year</b>		
			<del>HEAL 200</del>	<del>Determinants of Health</del>	<del>3</del>
HEAL 201	Canadian Health Care System	3	HEAL 201	Canadian Health Care System	3
HEAL 300	Methods of Data Analysis	3	HEAL 300	Methods of Data Analysis	3
HEAL 301	Health Research Methods	3	HEAL 301	Health Research Methods	3
HMKN 200	Exercise Physiology I	3	HMKN 200	Exercise Physiology I	3
			<del>HMKN 201</del>	<del>Exercise Psychology I</del>	<del>3</del>
HMKN 202	Human Motor Behaviour I	3	HMKN 202	Human Motor Behaviour I	3
HMKN 203	Lifespan Physical and Motor Development	3	HMKN 203	Lifespan Physical and Motor Development	3
<u>12 credits of 100- or</u>		<u>12</u>	Electives		<u>6</u>

<u>200-level</u> <u>electives<sup>1</sup></u>					
Total Credits		30		Total Credits	30
<b>Third Year</b>			<b>Third Year</b>		
HEAL 303	Health Program Evaluation	3		HEAL 303	Health Program Evaluation 3
<u>3 credits of</u> <u>300- or</u> <u>400-level</u> HEAL <u>electives</u>		3		HEAL <del>E</del> lective	3
<u>6 credits of</u> <u>300- or</u> <u>400-level</u> HMKN <u>electives<sup>2</sup></u>		6			
One of HMKN 320, HMKN 321	Health Education: Theory and Practice; or <u>Sport Psychology</u>	3		One of HMKN 320, HMKN 321	Health Education: Theory and Practice or <b>Exercise Psychology II</b>
HMKN 322	Health Promotion I	3		HMKN 322	Health Promotion I 3
HMKN 323	Introduction to Nutrition	3		HMKN 323	Introduction to Nutrition 3
<u>9 credits of</u> <u>electives<sup>1</sup></u>		9		HMKN Electives <sup>†</sup> <del>E</del> lectives <sup>1</sup>	6 9
Total Credits		30		Total Credits	30
<b>Fourth Year</b>			<b>Fourth Year</b>		
<u>12 credits</u> <u>of 300- or</u> <u>400-level</u> <u>HMKN</u> <u>electives<sup>2</sup></u>		<u>12</u>			
<u>3 credits of</u> HMKN 401, HMKN 499 <sup>3</sup>	Community Placement Experience; Project in Human	3		<del>One of</del> HMKN 401, HMKN 499;	Community Placement Experience, 3

Kinetics		<b>HEAL 450</b> Project in Human Kinetics, <del>Health Studies Practicum</del>
<u>15 credits of electives</u> <sup>1</sup>	<u>15</u>	<b>HMKN Electives</b> <sup>‡</sup> 9
Total Credits	30	<b>Electives</b> <sup>1</sup> 18
		Total Credits 30
<p><u><sup>1</sup>Students in the Health Promotion concentration are required to complete of total of 45 credits of electives, of which 6 credits must be completed at the 300- or 400-level.</u></p> <p><u><sup>2</sup>A minimum of 18 credits of HMKN electives are required.</u> Required courses for the Clinical Exercise Physiology concentration are also eligible electives.</p> <p><u><sup>3</sup>Permission of the School of Health and Exercise Science is required. Students may take no more than 9 credits combined of HMKN 401 and HMKN 499.</u></p>		<p><sup>‡</sup>Required courses for the Clinical Exercise Physiology concentration are also eligible electives <b>and a minimum of 12 credits of HMKN electives is required.</b></p> <p><del>[15816] HMKN Elective Credits</del>  <del>Students may fulfill their HMKN elective credits through a combination of courses from the alternative area of concentration, or the following courses:</del></p> <p><del>[15817]</del></p> <ul style="list-style-type: none"> <li><del>• HMKN 313 (3) Exercise Metabolism;</del></li> <li><del>• HMKN 314 (3) Body Composition;</del></li> <li><del>• HMKN 331 (3) Physical Dimensions of Aging;</del></li> <li><del>• HMKN 400 (3) Ethics for Health Practitioners</del></li> <li><del>• HMKN 410 (3) Cardio-Respiratory Disease: Pathology to Prescription;</del></li> <li><del>• HMKN 411 (3) Environmental Physiology;</del></li> <li><del>• HMKN 412 (3) Neuromuscular</del></li> </ul>

<p><b>[15818] Promotion Requirements</b></p> <p><b>[15820] Promotion to Second Year</b></p> <p><b>[15821]</b> Successful completion of 24 or more credits which must include first-year Human Kinetics core courses: <u><b>HMKN 100 (3), HMKN 101 (3), HMKN 190 (3) and HMKN 191 (3).</b></u></p> <p><b>[15822] Promotion to Third Year</b></p> <p><b>[15823]</b> Successful completion of 48 or more credits which must include 3 credits of first-year English and second-year Human Kinetics core courses: <u><b>HMKN 200 (3), HMKN 201 (3), HMKN 202 (3) HMKN 203 (3), HEAL 200 (3), and HEAL 201 (3).</b></u></p> <p><b>[15824] Promotion to Fourth Year</b></p> <p><b>[15825]</b> Successful completion of 78 or more credits.</p>	<p><b>Physiology;</b></p> <ul style="list-style-type: none"> <li>• <del>HMKN 413 (3) Cortical Control of Movement;</del></li> <li>• <del>HMKN 421 (3) Advanced Theories of Health Behaviour Change;</del></li> <li>• <del>HMKN 422 (3) Health Promotion II: Applications;</del></li> <li>• <del>HMKN 423 (3) Applied Nutrition: Exercise and Chronic Disease;</del></li> <li>• <del>HMKN 431 (3) Exercise Rehabilitation for Clinical Disorders of Aging.</del></li> </ul> <p><b>[15818] Promotion Requirements</b></p> <p><del><b>[15819] Promotion is dependent on the successful completion of a minimum number of credits as listed below.</b></del></p> <p><b>[15820] Promotion to Second Year</b></p> <p><b>[15821]</b> Successful completion of 24 or more credits which must include first-year Human Kinetics core courses.</p> <p><b>[15822] Promotion to Third Year</b></p> <p><b>[15823]</b> Successful completion of 48 or more credits which must include 3 credits of first-year English, <del>first-year Human Kinetics core courses,</del> and second-year Human Kinetics core courses.</p> <p><b>[15824] Promotion to Fourth Year</b></p> <p><b>[15825]</b> Successful completion of 78 or more <del>appropriate</del> credits <del>which must include 3 credits of first-year English, first-year Human Kinetics core courses, and second-year Human Kinetics core courses.</del></p>
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**[15826] Minor Programs**

**[15827]** Students who wish to focus their non-Human Kinetics electives may undertake an optional minor program in conjunction with the B.H.K. degree. All courses in the minor must be taken outside of Human Kinetics.

**[15828]** Students completing the B.H.K. may complete a Minor in Arts (e.g., Gender and Women's Studies, Indigenous Studies, Psychology, Sociology, etc.) or Science (e.g., Biology, Chemistry).

**Students must pay particular attention to the number of upper-level credits required for a minor versus the number of credits available in their upper-level non-HMKN electives. Careful planning is required. Please seek assistance from Academic Advising to ensure you are planning your program appropriately.**

**[15829] Minor in Arts**

**[15830]** An acceptable program must comprise courses in the Faculty of Arts and Sciences or the Faculty of Creative and Critical Studies that are for credit towards a B.A. degree, and consists of 18 upper-level credits in a single subject field or specialization. Students should design a coherent, academically sound course of studies for their minor. All courses must be acceptable for a B.A. major in the subject area or field, but a student is not bound by the other requirements that the Faculty of Arts and Sciences or the Faculty of Creative and Critical Studies sets for a major or minor in the field. Students who wish to pursue a minor in Arts should be aware of the prerequisites for many of the upper-level courses in Arts.

**[15831]** Upon successful completion of the minor program, the notation "Minor in Arts"

**[15826] Minor Programs**

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**[15831]** Upon successful completion of the minor program, the notation "Minor in Arts"

<p>will be denoted on the student's transcript.</p> <p><b>[15832] Minor in Science</b></p> <p><b>[15833]</b> An acceptable program must comprise courses in the Faculty of Arts and Sciences that are for credit towards a B.Sc. degree, and consists of 18 upper-level credits in a single subject field or specialization. Students should design a coherent, academically sound course of studies for their minor. All courses must be acceptable for a B.Sc. major in the subject area or field, but a student is not bound by the other requirements that the Faculty of Arts and Sciences sets for a major or minor in the field. Students who wish to pursue a Minor in Science should be aware of the prerequisites for many of the upper-level courses in Science.</p> <p><b>[15834]</b> Upon successful completion of the minor program, the notation "Minor in Science" will be denoted on the student's transcript.</p>	<p>will be denoted on the student's transcript.</p> <p><b>[15832] Minor in Science</b></p> <p><b>[15833]</b> An acceptable program must comprise courses in the Faculty of Arts and Sciences that are for credit towards a B.Sc. degree, and consists of 18 upper-level credits in a single subject field or specialization. Students should design a coherent, academically sound course of studies for their minor. All courses must be acceptable for a B.Sc. major in the subject area or field, but a student is not bound by the other requirements that the Faculty of Arts and Sciences sets for a major or minor in the field. Students who wish to pursue a Minor in Science should be aware of the prerequisites for many of the upper-level courses in Science.</p> <p><b>[15834]</b> Upon successful completion of the minor program, the notation "Minor in Science" will be denoted on the student's transcript.</p> <p><b>Type of Action:</b> Revise program.</p> <p><b>Rationale:</b> The main reason for the above suggested changes are to reflect the recent changes that have occurred within our overall program and individual courses at the senate level. This calendar document summarizes many areas of the degree so the changes that have occurred now need to be updated in this document. Another reason for the revisions is to improve the clarity of the document. The changes in the concentration descriptions better articulate the areas of study and career focus. The total credits are not changing but better allocated/distributed to ensure that students have opportunity for study abroad, practicum/directed study work, and electives and minors, but not at the expense of needed core Human Kinetics discipline content.</p>
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# THE UNIVERSITY OF BRITISH COLUMBIA



Okanagan Senate  
c/o  
Enrolment Services | Senate & Curriculum Services  
Brock Hall 2016 – 1874 East Mall  
Vancouver BC V6T 1Z1  
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megan.stewart@ubc.ca

December 7, 2012

To: Senate  
From: Learning & Research Committee  
Re: Candidates for Emeritus Status (approval)

---

The Learning & Research Committee Committee recommends approval of the following motion:

**Motion:** *That the attached list of individuals for emeritus status be approved and that, pursuant to section 9(2) of the University Act that they be added to the Roll of Convocation.*

Respectfully submitted,

Dr Peter Arthur  
Chair

**EMERITUS REPORT TO SENATE NOVEMBER 2012**

<b>Title</b>	<b>First Name</b>	<b>Last Name</b>	<b>Rank</b>	<b>Faculty/School</b>	<b>Department</b>	<b>Retirement Date</b>
Dr.	Fay	Karp	Assoc Professor Emeritus/Emerita	FacofHealth&SocialDevlmnt	Nursing	31-Dec-12
Dr.	Carol	McFadyen	Assoc Professor Emeritus/Emerita	FacofHealth&SocialDevlmnt	Nursing	31-Dec-12
Dr.	Judy	McAulay	Assoc Professor Emeritus/Emerita	FacofHealth&SocialDevlmnt	Nursing	31-Dec-12
Dr.	Marjorie	Wright	Assoc Professor Emeritus/Emerita	FacofHealth&SocialDevlmnt	Nursing	31-Dec-12





7 December 2012

From: Senate Nominating Committee, Okanagan Campus  
To: Okanagan Senate (Draft)  
Re: Appointment of Student Senator to the Senate Curriculum Committee

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The Nominating Committee recommends:

*“That Senate appoint Mr Tim Krupa to serve on the Senate Curriculum Committee until 31 April 2013 and thereafter until replaced.”*

---

Mr Tim Smith has been reassigned from the Senate Curriculum Committee to the Senate Committee on Admissions and Awards, leaving a vacancy on the Senate Curriculum Committee. Newly elected student Senator Mr Tim Krupa is willing to take up this position.

Respectfully submitted,

Curtis Tse, Chair  
Senate Nominating Committee



**a place of mind**  
THE UNIVERSITY OF BRITISH COLUMBIA

Office of the Provost & Vice Principal

## MEMORANDUM

**Date:** November 14, 2012  
**To:** Okanagan Senate  
**From:** Professor Wesley Pue, Provost and Vice Principal  
**Re:** Centre for Heart, Lung & Vascular Health (CHLVH)

---

Attached is the proposal for the creation of the Centre for Heart, Lung & Vascular Health (CHLVH) put forward by the Faculty of Health and Social Development. I have approved the creation of this centre on the basis of the terms contained in the proposal.

This is being presented to Senate for information pursuant to Senate Policy O-5.



**a place of mind**

**THE UNIVERSITY OF BRITISH COLUMBIA**

**Proposal to Establish the Okanagan Centre for Heart, Lung and Vascular Health at the University of British Columbia – Okanagan Campus**

Applicants

Dr. Philip Ainslie, PhD<sup>1,3</sup>  
Associate Professor  
CRC Chair in Cerebrovascular Physiology  
School of Health and Exercise Sciences  
Faculty of Health and Social Development  
HSC 118, Health Sciences Centre  
3333 University Drive  
Kelowna, BC, V1V  
Phone: 250-807-8089  
Email: philip.ainslie@ubc.ca

Dr. Neil Eves, PhD<sup>2,3</sup>  
Associate Professor  
Michael Smith Clinical Scholar  
School of Health and Exercise Sciences  
Faculty of Health and Social Development  
HSC 121, Health Sciences Centre  
3333 University Drive  
Kelowna, BC, V1V  
Phone: 250-807-9676  
Email: neil.eves@ubc.ca

**Laboratory Affiliations:**

- <sup>1</sup> – Cerebrovascular Research Laboratory (CRL)
- <sup>2</sup> – The Integrative Clinical Cardiopulmonary Physiology Laboratory (iCCP)
- <sup>3</sup> – The Integrative Cardiovascular and Respiratory Research Group

## TABLE OF CONTENTS

1.0 Justification and Vision.....	3
1.1 Mission.....	3
1.2 Vision and Goals.....	3
2.0 Specific Overview of the Proposed Research Centre.....	4
3.0 Leadership of the Proposed Research Centre.....	5
4.0 Staff Requirements.....	8
4.1 Space Requirements.....	8
4.2 Financing of the Proposed Research Centre.....	9
5.0 Promoting Research Excellence Through the Training of Highly Qualified Personnel.....	9
6.0 Deliverables Within the First 5 Years.....	11
APPENDIX A – Productivity, Funding and Training of HQP by the Integrative Cardiovascular and Respiratory Research Group Since inception in January 2011.....	13
APPENDIX B – Consultancy and Fee for Service Pricing: an Additional Income Source for the Centre of Heart, Lung and Vascular Health.....	23
APPENDIX C - UBC Respiratory Division – 2012 Fall Respiratory Research Seminar Series - Speaker Line Up.....	26
APPENDIX D – LETTERS OF SUPPORT.....	28

**1.0 Justification and Vision:** Cardiovascular, respiratory and cerebrovascular diseases are the main threat to global health and continue to be the leading cause of morbidity and mortality in Canada. Currently, 5 million Canadians are living with heart and/or respiratory disease or have had a stroke. With the aging population in Canada and the known association between age, cardiovascular, cerebrovascular and some respiratory diseases, these numbers will increase. This increase in prevalence will place a huge burden on the Canadian health care system as the total direct and indirect costs of treating heart, lung and vascular disease is already >\$35 billion.

Improved genetic, molecular and imaging techniques have advanced understanding of the etiology, progression and impact of these diseases. However, there remains considerable need for fundamental, integrative and translational research to help prevent and treat these devastating conditions. It is the aim of Dr. Phil Ainslie (Tier 2 CRC chair in Cerebrovascular Physiology) and Dr. Neil Eves (Michael Smith Clinical Scholar in Clinical Cardiopulmonary Physiology) to establish the first research centre of excellence in the BC interior focused specifically on heart, lung and vascular health research throughout the human lifespan. The proposed Okanagan Centre for Heart, Lung and Vascular Health (CHLVH) will be unique within interior BC focusing on all aspect of research from basic molecular and cellular sciences, through integrative system physiology and translational sciences into population health with the ultimate goal of preventing, treating and improving the health of British Columbians and Canadians. The CHLVH will build on the renowned history of excellence in heart and lung research at the University of British Columbia (Vancouver) but will offer a new dimension of expertise especially in integrative cardiovascular, respiratory and cerebrovascular physiology, and in different treatment therapies such as exercise, nutrition and physical activity.

This is an opportune time for such a proposal as there is an urgent need for research to improve the health of all Canadians. Furthermore, the proposed centre is inline with a number of clusters of UBC's strategic research plan, which aims to enhance and focus research on human health and genomics, neuroscience and cognitive systems, and population health. Additionally, the goals of the CHLVH are synergistic with the research goals of UBC Faculty of Medicine, which has identified "heart and lung" as a major strategic research focus. The proposed CHLVH is also timely considering Dr. Ainslie and Eves are in the final stages of establishing a 25-year longitudinal database to help facilitate a substantial volume of funding, research and training opportunities in cardiovascular, pulmonary and cerebrovascular physiology/health research in the BC interior (The **OK**anagan **C**ardiorespiratory and **V**ascular **D**isease [OK CVD] Database). This database will be a unique opportunity for collaborative research development, improving the impact of current research, enhancing external funding opportunities especially through provincial and federal sources, and offering training opportunities for highly qualified personnel (HQP) at both the undergraduate and graduate level.

**1.1 Mission:** The mission of the CHLVH will be to produce and disseminate internationally leading research into the causes, consequences and treatment of cardiovascular, pulmonary and cerebrovascular diseases.

**1.2 Vision and Goals:** The proposed CHLVH is envisioned to be a centre of excellence in basic translational and clinical research based in the Faculty of Health and Social Development but with links to researchers in other faculties and schools on the UBC Okanagan campus. Initially the major focus of the proposed research centre will be based on the growing strengths in systems physiology and population health research developing in the School of Health and Exercise Sciences (SHES). Thereafter, the goal will be that success leads to additional hires across the spectrum of disciplines in cardiovascular, respiratory and cerebrovascular research.

The initial goals of the proposed centre are:

1. To develop an internationally recognized center of excellence in heart, lung and vascular health research;
2. To establish and sustain state-of-the-art research programs directed at understanding the mechanisms of cardiovascular, respiratory and cerebrovascular diseases and developing effective prevention, diagnosis and treatment options;
3. To build an exciting, vibrant and competitive research centre to provide the highest standard of research training for undergraduate students, graduate trainees, post-doctoral fellows, medical students and residents;
4. To establish a research centre that encourages faculties at UBC-Okanagan to attract, hire and retain World-leading scientists in heart, lung and vascular research;
5. To establish links between industry and community partners to enhance knowledge translation and sharing of information in the BC interior and across Canada;
6. To secure ongoing extramural funding from federal and provincial agencies, industry, public and private foundations and philanthropists to enhance research programs, laboratory facilities and training opportunities in heart, lung and vascular research.
7. To fully establish the proposed 25-year longitudinal heart, lung and vascular health database (OK CVD).

## 2.0 Specific Overview of the Research Centre

Through existing collaborations within the School of Health and Exercise Sciences, the CHLVH will build on current strengths in cerebrovascular (Dr. Ainslie), pulmonary (Dr. Eves, Dr. Foster) and cardiovascular physiology/health (Dr.'s Ainslie, Eves, Foster and McManus) to establish a critical mass of researchers within these essential research areas. Through wider collaborations within SHES (Dr.'s van Donkelaar, Caperchione, Little), Biology (Dr. Ghosh), the Institute of Heart and Lung Health (Vancouver), the larger UBC Vancouver community and established National and International Collaborators, we will also build an extensive network of researchers that will worker on highly innovative research and training opportunities in heart lung and vascular health. The vision for the CHLVH is that it is not a “bricks and mortar” research centre but an “open access” centre that focuses on generating high impact, fundamental bench science to translational clinical research and population health, utilizing expert-led core shared facilities. Figure 1 (pg. 7) is a depiction of the breadth of research currently being performed by Dr.'s Ainslie and Eves and the other proposed members.

In the last two years, Dr.'s Ainslie and Eves have developed the Integrative Cardiovascular and Respiratory Research Group at UBC-O, which will supply the initial foundation and infrastructure for the development of the CHLVH (See Appendix A for detailed evidence of research productivity). *In brief, the productivity of this research group over the last 19 months includes: >55 peer publications; 7 book chapters; 1 book; training of 18 graduate students and fellows; > \$500K in external graduate student funding and >\$2.8M of total external funding bought directly into UBC-O.* As part of the growth of this initial research group, extensive research links and collaborations have been made with laboratories, research centres and institutes around the World (See section 5.0). This growing network of researchers and the partnerships with other well-established research institutes will greatly increase the breadth; sophistication and impact

of research performed by the CVLVH and will present a number of excellent training opportunities for graduate students and post-doctoral fellows within the centre.

With the successful establishment of the CVLVH it is anticipated that future hires within SHES, the Faculty of Medicine Southern Medical Program or other schools and Faculties on campus (i.e. biology) could be strategically focused to further enhance heart, lung and vascular health research on the UBC-O campus. With the recent cardiovascular physiology hire in SHES we are close to developing a critical mass of integrative physiologists in the cardiovascular, cerebrovascular and pulmonary sciences but additional hires in complementary areas would further our current strengths. To be successful in better understanding diseases of the heart, lungs and vasculature there is considerable need for basic scientists in relevant research areas who can supply the foundational understanding of the genetic, molecular and cellular aspects of disease. Through discussion between SHES and SMP it would appear that a number of hires may be made in these areas within the next 12-months. Additionally, hires in translational and population health researchers will be critical for moving developments in the basic and integrative sciences into future advances in clinical practice and improved human health.

### **3.0 Leadership of the Proposed Research Centre**

The proposed research centre will be housed within the School of Health and Exercise Sciences in the Faculty of Health and Social Development. During the initial establishment and preliminary running of the centre Dr. Philip Ainslie and Dr. Neil Eves will act as co-directors with advice from a scientific advisory board made up of other affiliated scientists and external members (e.g. Dr. Bill Nelms [Thoracic Surgery], Dr. Douglass Rolf [Pulmonary], Prof. Allan Jones [Medicine]). The primary role of the co-directors will be:

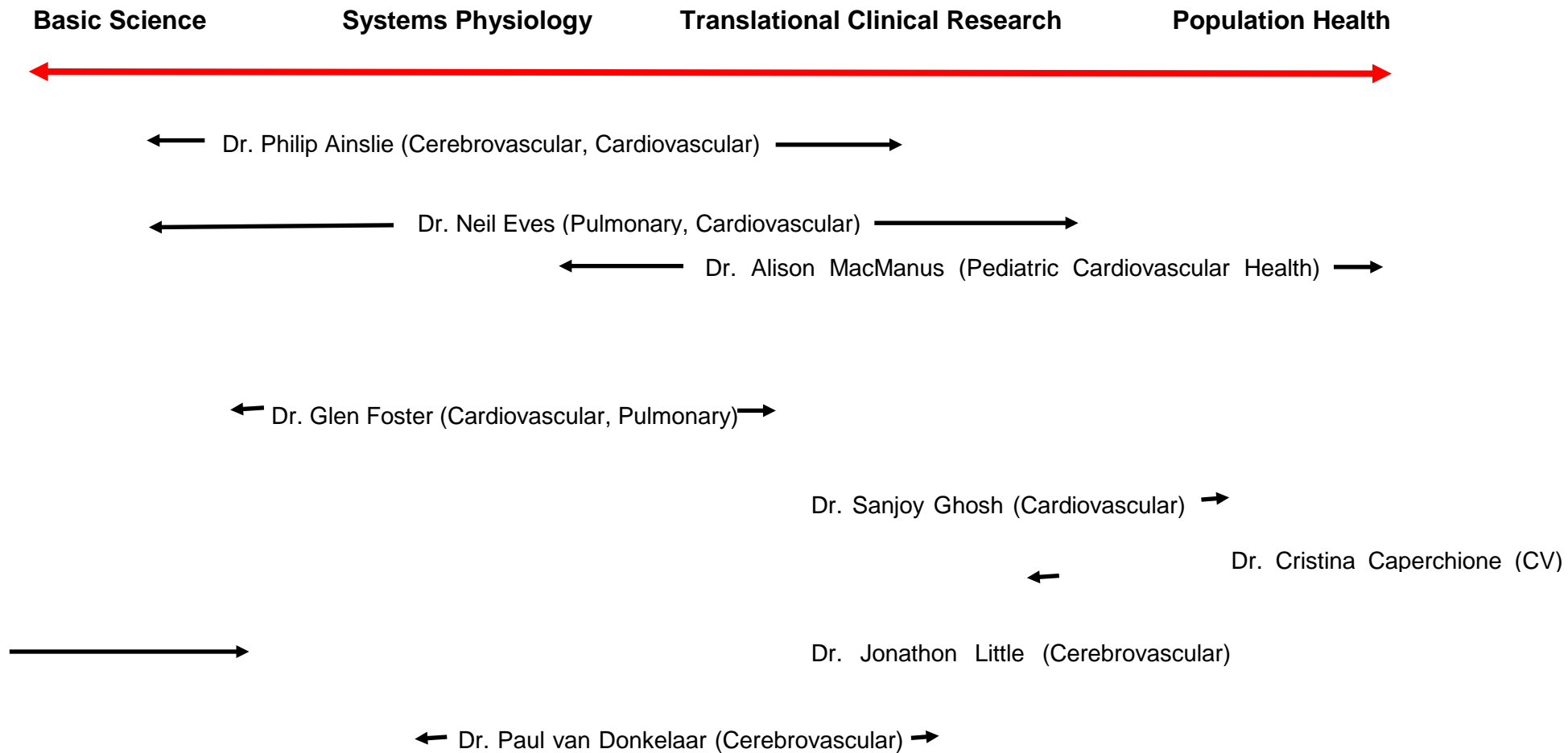
1. Provide scientific leadership and facilitation of research projects and appointments to strengthen the scientific impact of heart, lung and vascular health research;
2. To coordinate facilities to enhance research and training opportunities on a regional, provincial and national level, and to establish core facilities within existing laboratories to enhance research collaboration and productivity;
3. To continue building and establishing networks between: 1) Faculties within UBC-O, 2) Interior health, 3) provincial, national and international scientists that focus on heart, lung and vascular health research and 4) other established institutes and research centres;
4. To forge new multidisciplinary research and training environments within heart, lung and vascular health.
5. To assist with advice on grants administration, financial management, regulatory affairs, and personnel issues within the research centre;
6. To facilitate interactions with basic scientists, physiologists, translational scientists and population health specialists to help meet the goals of the Centre;
7. To help procure industry and philanthropic funds to develop a stable financial structure for the ongoing running of the research centre and its resources. The co-directors will also work toward securing ongoing scholarship and funding support for trainees and post-doctoral fellows;

8. To provide guidance, support and mentorship to Junior Faculty members within the centre and trainees who perform, heart, lung and vascular research.

The Directors of the Center will report directly to the Dean of the Faculty of Health and Social Development.



**Figure 1: Proposed Affiliated Members of the Okanagan Centre for Heart, Lung and Vascular Health Research**



Upcoming hires SMP (CV, Pulm) →

#### 4.0 Staff Requirements

In the establishment of the Centre for Heart, Lung and Vascular Health a 1.0 FTE is requested for administrative support and a 1.0 FTE for technical laboratory support. These two personnel positions will vastly improve the productivity of researchers within the research centre by allowing them to focus on performing research related endeavors rather than spending considerable time per year on administrative duties related to running a research program and performing general laboratory tasks that could easily be performed by a well trained administrator or technician.

The administrative support is needed to cover the following functions:

1. Financial management
2. Grants administration
3. Regulatory affairs
4. Procurement
5. Personnel issues
6. Organization of visiting speakers and scientists
7. Organization of visiting trainees and PDF's
8. Organization of professors on sabbatical
9. Maintenance of Centre website
10. Management of fee for service bookings

The technical laboratory support is needed to cover the following functions:

1. Maintenance of core equipment within the laboratories of centre members.
2. Monitor and facilitate utilization of laboratory equipment.
3. Assist with the training of trainees and PDF's on core equipment within the research centre.
4. Purchase supplies and disposables for research laboratories.
5. Perform the fee for service assessments presented in 4.2 and Appendix B

#### 4.1 Space Requirements

Dr. Ainslie and Eves currently have their own laboratory space, which they share as core space facilities. Their laboratories are in the Art Building (ART 182-184) and in the Reichwald Health Sciences Centre (HSC 108). It is anticipated that other affiliated members of the CHLVH will already have laboratory space within their own Faculties. On arrival at UBC-O, Dr. Alison MacManus (July 2013) and Dr. Glen Foster (July 2013) will also be obtaining laboratory space likely within close proximity to ART 182-184. As previously mentioned, for the proposed centre to be successful a physical space is not a key requirement, rather the intent is for an open access centre where affiliated members and collaborators can utilize the existing facilities that are managed by experts in each specific field of study. As such we request no additional space apart from the small room at the back of our basic science laboratory (Art 180) which is a ~300 sq ft space currently being used for storage that is ideal for a fee for service facility independent of current research space to help generate revenue for the ongoing running costs of the centre (see Appendix B). It also has two small offices, which would ideally house the requested administrative and technical assistants, without placing further demands on space in the Faculty of Health and Social Development. This additional space has been agreed upon through negotiation with Dr. Paul van Donkelaar (Director SHES) and Dean. Gordon Binsted (Please see letters of support Appendix D).

## 4.2 Financing of the research centre

The majority of operating costs for the centre will come from external grant funding. However \$20K/year has been secured from the School of Health and Exercise Sciences for the first five years to cover general operating and maintenance of core facilities (Please see letter of support from Dr. Paul van Donkelaar – Appendix D). Dr.'s Ainslie and Eves have a proven track record in obtaining external funding at the provincial and national level and the collaborations that will ensue from the creation of the CHLVH will facilitate further success in grant funding. In addition, the centre will work with Sharon De Vries, from the Development and Advancement office to generate industrial and philanthropic partnerships that will be pivotal to the evolution, retention and sustainability of the research centre and its members. Additional grant funding for visiting professors, sabbaticals and seminar funds will also be applied for to invite leading researchers from around the World to come to UBC-O.

In addition to external income generation through grant-funding agencies, the CHLVH has the capacity to generate additional income through a consultancy stream given its operational capacity to perform clinical, health and performance assessments. For instance, the CHLVH has the expertise to provide a whole battery of validated tests associated with understanding vascular, cardiac and cerebrovascular health. Considering the ageing demographic of Kelowna and the extent of cardiovascular disease within interior BC this could be a highly sought after service. Additionally, with the high number of local athletes in Kelowna, fitness screening will be of particularly use to the many local and national level athletes in the Okanagan who do not have access to these resources that are currently only available in Vancouver, Victoria or Calgary. This capacity will expand the University's clinical-consultancy portfolio and in so doing, form the basis of unique longitudinal research associated with the OK CVD database currently being constructed. These additional funds will greatly enhance the ability for the CHLVH to become financially sustainable and will supply additional funds to support trainees as well as young scientists and their training programs (Please see Appendix B).

## 5.0 Promoting Research Excellence Through the Training of Highly Qualified Personnel

The training of highly qualified personnel is an essential part of any successful research centre and the CHLVH will strive to provide the highest level of undergraduate and graduate training. Trainees will be exposed to a collaborative and integrative research experience and will gain knowledge in multiple techniques and disciplines. Through the laboratories of members of the CHLVH, students will be exposed to research in basic science through population health, which will greatly enhance awareness of this critical spectrum of research. This breadth and quality of training will lead to stronger, well-rounded scientists with an appreciation of all aspect of heart lung and vascular research. In additional to providing state-of-the-art laboratory opportunities and a highly collaborative training environment the CHLVH will also strive to provide additional opportunities that will greatly enhance our ability to attract and retain the best students from around the world. These include:

### 1) Affiliation with the Providence Institute of Heart and Lung Health in Vancouver

The mission and vision of the CHLVH is in line with the strategic plan of the Institute of Heart and Lung Health (IHLH) based in Vancouver, which has been established recently through the integration of the Centre for lung health and the Providence Heart and Lung Institute at St. Paul's Hospital. The IHLH is associated with ~20 other research centre that investigate some aspect of heart and lung health, all of which are based in Vancouver. The CHLVH offers a different focus of integrative and basic science research to that currently at the IHLH and will be unique in that it is the only research centre based outside of Vancouver or the Lower Mainland.

Affiliation with the IHLH will immediately enhance access for researchers, clinicians and trainees to an extensive network of collaborative research opportunities, resources and expertise, many of whom are World leaders in heart and lung research. Please see letter of support from Dr. Bruce McManus (Co-Director, Institute for Heart + Lung Health Director, Appendix D).

## 2) National and International Research Exchange Program

The CHLVH will build on already developed partnerships and established research collaborations as well as visiting professor opportunities to establish a national and international scientific exchange program. The novelty and impact of this program is useful in many ways including:

1. Allows research questions to be addressed in a multi-centre approach with different clinical populations and equipment capabilities.
2. Facilitates national and international grant applications (e.g., NIH, European grants, etc).
3. Provides world-class training and networking opportunities for HQP to learn new skills at different institutions around the world.

Our national and international collaborators who are committed to the mission of our exchange program and many of which have already supported research placements within their laboratories include:

### *Nationally:*

- **University of British Columbia, Vancouver** - Prof. Bill Sheel (Kinesiology); Dr Mike Khoele (Kinesiology); Prof. Grant Iverson (Psychiatry); Dr Darren Warburton (Kinesiology); Dr Jeremy Road (Medicine), Dr. Pat Camp (Physical Therapy), Dr. Don Sin (Pulmonary Medicine), Dr. Mark Fitzgerald (Pulmonary Medicine).
- **Simon Fraser University** – Dr Matt White (Kinesiology)
- **University of Toronto** – Prof. Joe Fisher (Medicine), Prof. Jim Duffin (Medicine), Dr. Jack Goodman (Kinesiology and Physical Education)
- **McMaster University** – Prof. Maureen MacDonald (Kinesiology)
- **University of Calgary** – Prof. David Proud (Physiology/Medicine), Dr. Richard Leigh (Medicine), Dr. Israel Belenkie (Cardiology), Dr. Michael Roman (Pulmonary Medicine), Dr. Warren Davidson (Pulmonary Medicine), Dr. Dustin Hittel (Kinesiology).
- **University of Alberta** – Dr. Michael Kennedy (Physical Education and Recreation), Dr. John Mackey (Oncology)
- **University of Manitoba** – Dr. Jon McGavock (Pediatrics)
- **University of Laval** – Prof. Francois Maltais (Medicine)
- **University of McGill** – Dr. Russel Hepple (Kinesiology), Dr. Tanja Taivassalo (Kinesiology)

### *Internationally:*

- **University of Otago, New Zealand** – Drs Jim Cotter (Physical Education), Sam Lucas (Physiology), & Shieak Tzeng (Medicine),
- **Toyo University, Japan** – Prof. Shikego Ogoh (Bioengineering),
- **Liverpool John Moores University** – Prof. Keith George (Exercise Science), Dr. Helen Jones (Exercise Science),
- **University of Wales** – Prof. Rob Shave (Physiology),
- **University of Glamorgan** – Prof. Damian Bailey (Health and Exercise),
- **University of Western Australia, Australia** – Prof. Danny Green (Health and Exercise),
- **Curtin University of Technology** – Dr. Kylie Hill (Physical Therapy)
- **University of Sydney, Australia** – Prof. Keith Burgess (Medicine)
- **University of Oxford, UK** – Dr. Stephan Payne (Bioengineering and Physiology)

- **Duke Medical School** – Dr. David Macleod (Anesthesiology), Dr. Lee Jones (Radiation Oncology)
- **University of Texas** – Dr. Caroline Rickards (Physiology),
- **Harvard Medical School/MIT** – Dr. Leo Celi (Medicine),

**3) Cardiovascular, Pulmonary and Cerebrovascular Journal Club** – In place since the inception of the integrative Cardiovascular and Respiratory Research Group (Jan 2011), this journal club provides a forum for faculty members and students to present and critique the latest science in heart, lung and vascular physiology.

**4) Clinical Cardiovascular and Respiratory Journal Club** – Established in April 2012 allows Faculty and students to discuss and present the latest clinical translational science in heart, lung and vascular health and to anonymously discuss clinical testing results from ongoing clinical trials.

**5) UBC Respiratory Division Fall Respiratory Research Seminar Series** – Starting in September 2012 the researchers and students interested in respiratory research will be able to listen, watch and contribute to the respiratory seminar series held in Vancouver. This seminar series has leading expertise from across Canada and around the globe presenting on a weekly bases. For the 2012-2013 schedule please see Appendix C.

**6) CHLVH Research Seminars** – The centre will establish a research seminar series that provides a forum for presentations by University faculty and trainees. The series will also feature regularly invited internationally recognized speakers in heart, lung and vascular health research. Featuring external speakers on a regular basis is pivotal to highlighting the positive cardiovascular, pulmonary and cerebrovascular research environment that exists at the University. Significant too are interactions with external speakers that will lead to collaborations, invited presentations, and appointments to national committees.

**6) CHLVH Research Day** – In collaboration with UBC Media, the CHLVH will also establish a research day. The research day will include a couple of externally invited keynote speakers but will primarily focus on student and faculty presentations (poster and oral) to highlight research that is being performed by the CHLVH. Individuals from other UBC-O faculties, Interior health and local communities as well as the general public will also be invited to attend.

## **6.0 Deliverables within the first 5 years**

Within the first 5 years after the establishment of the CHLVH at UBC-O we will intend to successfully present a number of outcomes that demonstrate the initial success of the proposed venture and provide the foundation for further growth, expansion and research innovation. The following is a list of deliverables that the CHLVH intends to achieve by 2017:

- 1) The development of a group of nationally and internationally recognized researchers who have successfully obtained extramural funding for heart, lung and vascular health research;
- 2) To greatly increase the volume and impact of scientific journal articles, international research presentations, research symposia and knowledge dissemination in the field of heart, lung and vascular health.

- 3) To have established a centre for excellence in research training which is competitively selecting the top graduate students and post-doctoral fellows from Canada and around the World.
- 4) To have established links with a number of partners in industry, health organizations and the local community and to have establish avenues for the translation of knowledge from the CHLVH to local communities and across Canada.
- 5) To become financially sustainable through extramural funding and internal initiatives (i.e. fee-for-service testing) and to have established ongoing funding for scholarships, awards and small research grants.

Following successful achievement of these initial outcomes, extensive further planning, and goal setting will be performed by the co-directors and the scientific advisory committee to set even higher standards and goals for the following decade.

## **APPENDIX A**

PRODUCTIVITY, FUNDING AND TRAINING OF HIGHLY QUALIFIED PERSONNEL BY THE INTEGRATIVE CARDIOVASCULAR AND RESPIRATORY RESEARCH GROUP SINCE INCEPTION IN JANUARY 2011.



**Productivity, funding and training of highly qualified personnel by the integrative cardiovascular and respiratory research group consisting of the laboratories of Dr. Ainslie and Dr. Eves in the 19 months since inception.**

**Articles published or in-press in referred journals (01/11-07/12):**

**Notation**

*Supervised students of Ainslie and Eves are underlined.*

1. **Ainslie PN**, Lucas S, Fan M, Thomas KN, Cotter JD, Burgess KR (2012) Influence of sympathoexcitation on cerebrovascular function and ventilatory control at high altitude. *J Appl Physiol*, In Press
2. Ainslie PN (2012) Regional brain blood flow regulation during orthostatic stress: new insights from Duplex sonography. *Experimental Physiol*, In Press
3. Bailey DM, Jones DJ, Sinnot A, Brugniaux JV, New K, Hodson D, Marley CJ, Smirl JD, Ogoh S, **Ainslie PN** (2012) Impaired cerebral hemodynamic function associated with chronic traumatic brain injury in professional boxers. *Clin Sci*, In Press
4. Tzeng YC, **Ainslie PN**, Cooke WH, Peebles KC, Willie CK, MacRae B, Smirl JD, Horsman H & Rickards CA (2012) Assessment of cerebral autoregulation: the quandary of quantification. *Am J Physiol Heart and Circ*, In Press
5. Phillips AA, **Ainslie PN**, Warburton DE (2012) Baroreflex function following spinal cord injury. *Journal of Neurotrauma*, In Press
6. Morrison SA, **Ainslie PN**, Lucas R, Cheung S, Cotter JD. (2012) Compression garments do not alter cerebrovascular responses to orthostatic stress after mild passive heat. *Scand J Med Sci Sports*, In press
7. Sugawara J, Willie CK, Miyazawa T, Komine H, Akimoto T, **Ainslie PN**, Ogoh S. (2012) Effects of transient change in carotid arterial stiffness on arterial baroreflex during mild orthostatic stimulation. *Artery Research*, In press
8. Smith KJ, Wong LE, **Eves ND**, Koelwyn GJ, Smirl JD, Willie CK, **Ainslie PN**. Regional Cerebral Blood Flow Distribution During Exercise: Influence of Oxygen. *Accepted by Respiratory Physiology and Neurobiology* (July 19<sup>th</sup>, 2012).
9. Koelwyn GE, Wong LE, Kennedy MD, **Eves ND**. The effect of hypoxia and exercise on heart rate variability, immune response, and orthostatic stress. *Accepted pending revisions. Scandinavian Journal of Exercise and Science in Sports and Exercise* (June 2012).
10. Davidson WJ, Verity WS, Traves SL, Leigh R, Ford GT, **Eves, ND**. The Effect of Incremental Exercise on Airway and Systemic Inflammation in Patients with COPD. *Journal of Applied Physiology*, 112(12): 2049-56, 2012.
11. Lewis NC, **Ainslie PN**, Atkinson G, Jones, H, Lucas S. The effect of time of day and sympathetic blockade on orthostatic tolerance *Cronobiology Int*, In press, 2012.
12. Smirl JD, Haykowsky M, Nelson M, **Ainslie PN**. Resting and exercise cerebral blood flow in long-term heart transplant recipients. *J of Heart and Lung Transplant*, In press, 2012.
13. Willie CK, Macleod DB, Shaw A, Smith KJ, Tzeng YC, **Eves ND**, Ikeda K, Graham J, Lewis NC, Day TA, **Ainslie PN**. Regional Brain Blood Flow in Man during Acute Changes in Arterial Blood Gases. *Journal of Physiology*, 590(14): 3261-3275, 2012.
  - a. Manuscript accompanied by an Editorial: Barnes JN. Beyond a one-track mind: understanding blood flow to the brain in *Journal of Physiology*, 590(14): 3217, 2012.
14. Murrell C, Cotter JD, Lucas S, Wilson L, Thomas K, Williams MJ, **Ainslie PN**. (2012) Cerebral blood flow and cerebrovascular reactivity at rest and during sub-maximal exercise: Effect of age and 12 weeks exercise training. *Age*. In press.

15. Koelwyn GK, Jones LW, Hornsby WE, **Eves ND**. Exercise Therapy in the Management of Dyspnea in Patients with Cancer. *Current Opinion in Supportive & Palliative Care* 6(2): 129-137, 2012.
16. Gelinas J, Marsden KR, Tzeng YC, Smirl JD, Smith KJ, Willie CK, Lewis NC, Binsted G, Bakker A, Day TA, **Ainslie PN**. Influence of posture on the regulation of cerebral perfusion. *Aviation, Space and Environmental Medicine, In press*, 2012.
17. Godoy D, Rabinstein A, Biestro A, **Ainslie PN**, Napoli M. Effects of Indomethacin Test on Intracranial Pressure and Cerebral Hemodynamics in Patients With Refractory Intracranial Hypertension: A Feasibility Study. *Neurosurgery, In Press*, 2012.
18. Andrews GR, **Ainslie PN**, Shepard K, Burgess KR. The effect of partial acclimatisation to high altitude on loop gain and central sleep apnoea severity. *Respirology*, 17(5): 835-840, 2012.
19. Lucas SJ, **Ainslie PN**, Murrell CJ, Thomas KN, Franz EA, Cotter JD. Effect of age on exercise-induced alterations in cognitive executive function: Relationship to cerebral perfusion. *Experimental Gerontology, In Press*, 2012.
20. Fan JJ, Burgess KR, Thomas KN, Cotter JD, Kayser B, Peebles, KC, **Ainslie PN**. Influence of acetazolamide on cerebrovascular function and breathing stability at 5050m. *Journal of Physiology*, 1213-25, 590, 2012.
21. Lakoski SG, **Eves ND**, Douglas, PS, and Jones LW. The Role of Exercise Training in Patients with Solid Tumors: Effects on Cardiopulmonary Function and Underlying Mechanisms. *Nature Reviews Clinical Oncology*. 9, 288–296, 2012.
22. Takahashi K, **Eves ND**, Piper A, Song Y, Maher TM. Respirology Year in Review: Acute Lung Injury, Interstitial Lung Diseases, Sleep, Physiology and Lung Cancer. *Respirology* 17(3), 554–562, 2012.
23. Jones LW, Hornsby, WE, Goetzinger A, Quist M, West M, **Eves ND**, Gradison M, Coan A, Abernethy AP. Prognostic Significance of Functional Capacity and Exercise Behavior in Patients with Metastatic Non-Small Cell Lung Cancer. *Lung Cancer*, 76(2): 248-52, 2012.
24. Burr JF, Davidson WJ, Shephard RJ, **Eves ND**. Chronic Respiratory Conditions: Assessing Risk for Physical Activity Clearance and Prescription. *Accepted by Canadian Family Physician* (July 21<sup>st</sup>, 2011).
25. Ross EZ, Cotter JD, Wilson LC, Fan JL, Lucas SL, **Ainslie, PN**. Cerebrovascular and corticocomotor function during progressive passive hyperthermia in humans. *Journal of Applied Physiology*, 112:748-58, 2012.
26. Lucas RAI, **Ainslie PN**, Thomas KN, Cotter JD. Influence of compression and aging on the circulatory adjustments to orthostasis and heat stress. *AGE* 34: 439-49, 2012.
27. Marsden KR, Hayhowsky MJ, Smirl JD, Jones H, Nelson MD, Altamairano-Diaz L, Gelinas JC, Smith KJ, Willie CK, Bailey DM, **Ainslie PN**. Aging blunts hyperventilation-induced hypocapnia and reduction in cerebral blood flow during maximal exercise. *AGE* (In Press), 2012.
28. **Eves ND** and Koelwyn GJ. Short of breath: Short of benefit: important considerations for the rehabilitation of IPF patients. *Respirology*, 16(8):1163-4, 2011.
29. Lubans DR, Plotnikoff RC, Jung M, **Eves N**, Sigal R. Testing Mediator Variables in a Resistance Training Intervention for Obese Adults with Type 2 Diabetes. *Psychology and Health* [Epub ahead of print], 2011.
30. Warburton DER, Jamnik VK, Bredin SSD, Burr, J, Charlesworth S, Chilibeck P, **Eves ND**, Foulds H, Goodman J, Jones LW, McKenzie DC, Rhodes R, Riddell M, Shephard RJ, Stone J, Thomas S, E. Zehr EP, Gledhill N. The 2011 Physical Activity Readiness Questionnaire (PAR-Q+) and the Electronic Physical Activity Readiness Medical Examination (ePARmed-X+). *Health and Fitness Journal of Canada*. 4(2): 24-25, 2011.
31. **Ainslie PN**, Lewis NC, **Eves ND**. Endogenous circadian rhythm in vasovagal response to head-up tilt. *Circulation* 124: 358, 2011.

32. Bailey DM, Evans KA, McEneny J, Young IA, Hullin DA, James PE, Ogoh S, **Ainslie PN**, Lusshesi C, Rockenbauer A, Culcasi M, Pietri. Exercise-induced oxidative-nitrosative stress is associated with impaired dynamic cerebral autoregulation and blood-brain barrier leakage. *Experimental Physiology* 96: 1196-20, 2011.
33. Nelson MD, Haykowsky MJ, Stickland MK, Altamirano-Diaz LA, Willie CK, Smith KJ, Petersen SR, **Ainslie PN**. Reductions in cerebral blood flow during passive heat stress in humans: partitioning the mechanisms. *J Physiology* 589: 4053-63, 2011.
34. Bellapart J, Fraser J, **Ainslie PN**, Tzeng YC, Chan G, Dunster K, Barnet A, Boots R. The effect of ventricular assist devices on cerebral and systemic blood flow fractality. *Physiological Measurement*. 32:1361-72, 2011.
35. **Ainslie PN**, Smith KJ. Integrated human physiology: Breathing, blood pressure and blood flow to the brain. *J Physiology* 589:2917, 2011.
36. Willie CK, **Ainslie PN**. Cool head, hot brain: cerebral blood flow distribution during exercise. *J Physiology* 589: 2657-8, 2011.
37. Taylor CE, Atkinson G, Willie CK, Jones H, **Ainslie PN**, Tzeng YC. Diurnal variation in the mechanical and neural components of the baroreflex. *Hypertension* 58: 51-6, 2011.
38. Tzeng YC, Chan G, Willie CK, **Ainslie PN**. Determinants of cerebral-flow velocity relationships in humans: new insights from cerebral Ca<sup>2+</sup> blockade. *Journal of Physiology* 589: 3263-3274, 2011.
39. Jones H, Lewis NC, Green DJ, **Ainslie PN**, Lucas SJ, Tzeng S, Grant EJ, Atkinson G. (2011) Alpha-<sub>1</sub> adrenoreceptor blockade diminishes diurnal variation in endothelial-dependent flow mediated dilation in humans *American Journal of Physiology* 300:1437-42, 2011.
40. Perry SE, Koelwyn GJ, Wong LE, Davidson WJ, **Eves ND**. Helium-Hyperoxia: Alleviating Respiratory Limitation to Improve the Benefits of Pulmonary Rehabilitation. *International Journal of Respiratory Care*, 7(1) 19-24, 2011.
41. Pendharkar SR, Tsai WH, **Eves ND**, Ford GT, Davidson WJ. Continuous Positive Airway Pressure Therapy Increases Exercise Tolerance in Obese Subjects with Obstructive Sleep Apnea. *Respiratory Medicine* 105, 1565-1571, 2011.
42. Jones LW, **Eves ND**, Spasojevich I, Il'yasova D. Effect of Aerobic Training on Oxidative Stress in Postsurgical Non-Small Cell Lung Cancer Patients. *Lung Cancer* 72(1): 45-51, 2011.
43. Bellpart J, Chan G, Tzeng YC, **Ainslie PN**, Barnet AG, Dunster KR, Boots R, Fraser JF. The effect of ventricular devices on cerebral autoregulation: a preliminary study. *BMC Anesthesiology* 11:4-8, 2011.
44. Willie CK, Cowan E, **Ainslie PN**, Taylor C, Smith KJ, Tzeng YC. Distribution of cerebral blood flow and neurovascular coupling during exercise. *Journal of Neuroscience Methods* 198: 270-3, 2011.
45. Donnelly J, Cowan DC, Yeoman DJ, Lucas SJE, Herbison GP, **Ainslie PN**, Taylor DR. Exhaled nitric oxide and pulmonary artery pressures during graded ascent to high altitude. *Respiratory Physiology and Neurobiology* 177: 213-7, 2011.
46. Donnelly J, Lucas SJE, Cotter JD, **Ainslie PN**. Profound hyperventilation and development of periodic breathing during exceptional orthostatic stress in a 21 year-old man. *Respiratory Physiology and Neurobiology* 177:66-70, 2011.
47. Willie CK, **Ainslie PN**, Taylor C, Sin PYW, Jones H, Tzeng YC. Exacerbation of post-exercise cardiovagal baroreflex hysteresis is explained by selective reductions in carotid baroreflex neural transduction. *Hypertension* 57:927-33, 2011.
48. Chan G, **Ainslie PN**, Willie CK, Taylor C, Atkinson G, Jones H, Lovell N, Tzeng YC. Contribution of arterial Windkessel in low frequency cerebral hemodynamics during transient changes in blood pressure. *Journal of Applied Physiology* 110: 917-25, 2011.

49. Willie CK, Colino FL, Bailey DM, Tzeng YC, Binsted G, Haykowsky MJ, Bellapart J, Ogoh S, Smirl J, Smith K, Bailey DM, Ainslie PN. Utility of transcranial Doppler ultrasound for the integrative assessment of cerebrovascular function. *Journal of Neuroscience Methods* 196:221-37, 2011.
50. Lucas SJE, Tzeng YC, Ainslie PN. The cerebrovascular pressure-flow relationship: a simple concept but a complex phenomenon. *Hypertension* 46:312-13, 2011.
51. Lucas SJ, Burgess KR, Fan JJ, Lucas RAI, Peebles K, Cotter JD, Thomas K, Basnyat R, Thomas KN, Ainslie PN. Alterations in cerebral blood flow and cerebrovascular reactivity during 14 days at 5050m. *Journal of Physiology* 589: 741-753, 2011.
  - a. Manuscript accompanied by an Editorial: Foster GE (2011) High on altitude: new attitudes toward human cerebral blood flow regulation and altitude acclimatization. *Journal of Physiology* 589:449].
52. Lewis N, Atkinson G, Lucas S, Grant E, Jones H, Tzeng YC, Horseman H, Ainslie PN. Is there diurnal variation in initial and delayed orthostatic hypotension during standing and head-up tilt? *Chronobiology International* 28:135-145, 2011.
53. Fan JJ, Burgess KR, Lucas RAI, Lucas S, Peebles K, Thomas KN, Cotter JD, Ainslie PN. Influence of indomethacin on the ventilatory and cerebrovascular responsiveness to hypercapnia and hypoxia *European Journal of Applied Physiology*. 111: 601-10, 2011.
54. Murrell C, Cotter JD, George K, Shave R, Oxborough D, Wilson L, Thomas K, Williams MJ, Ainslie PN. Post-exercise and early postural hypotension are unrelated to syncope following prolonged exercise. *European Journal of Applied Physiology*. 111: 469-76, 2011.
55. Murrell C, Cotter JD, George K, Shave R, Oxborough D, Wilson L, Thomas K, Williams MJ, Ainslie PN. Cardiorespiratory and cerebrovascular responses to head-up tilt II: influence of age, training status and acute exercise. *Experimental Gerontology* 46: 1-8, 2011.
56. Murrell C, Cotter JD, George K, Shave R, Oxborough D, Wilson L, Thomas K, Williams MJ, Ainslie PN. Cardiorespiratory and cerebrovascular responses to head-up tilt I: influence of age and training status. *Experimental Gerontology* 46: 9-17, 2011.

#### **Articles submitted to refereed journals:**

57. Vasanji Z, Sigal RJ, Groves E, Isaac DL, Eves ND. Reproducibility of Two-Dimensional and Doppler Echocardiography during Exercise. *Submitted to Journal of Applied Physiology* (July 2012).
58. Vasanji Z, Thompson RB, Eves ND, Isaac DL, Friedrich MG, Chow, K, Sigal RJ. Increased Left Ventricular Extracellular Volume and Twist Function in Type 1 Diabetic Individual. *Submitted to Circulation: Cardiovascular Imaging* (May 2012).
59. Willie CK, Ainslie PN, Taylor CE, Eves ND, Tzeng YC. Maintained Cerebrovascular Function During Post-Exercise Hypotension. *Submitted to Acta Physiologica* (April 2012).
60. Roman MA, Koelwyn GK, Eves ND, Jones LW. Assessment of Physical Functioning in Surgical Candidates with Non-Small Cell Lung Cancer: Preliminary Comparison of Performance Status to Symptom-Limited Cardiopulmonary Exercise Testing. *Submitted to Journal of Thoracic Oncology* (May 2012).
61. Vasanji Z, Eves ND, Isaac DL, Sigal RJ. Aerobic exercise training alters left ventricular diastolic function in type 1 diabetic individuals: a cross-sectional study. *Submitted to Cardiovascular Diabetology* (June 2012).
62. Burgess KR, Lucas SJE, Shepherd K, Dawson A, Swart M, Thomas KN, Fan JL, Lucas RA, Donnelly J, Peebles KC, Basnyat R, Ainslie PN (2012) Central sleep apnea at high altitude – an important role of cerebral blood flow. *Sleep*, In Review (July 2012)

**Refereed Books (01/11-07/12):**

1. Ainslie PN (2012) *Human Ultrasonography* (ISBN: 978-953-307-652-2) Intech., New York (In Press)

**Refereed Book Chapters (01/11-07/12):**

1. **Ainslie PN** (2012) Chapter 7: Cardiovascular Physiology. Textbook: Exercise Physiology in Canada, First Edition. Publisher: McGraw-Hill. (Invited contribution)
2. Donnelly J, **Ainslie PN** (2012) Chapter 16: High Altitude Physiology - Climbing the Highest Peak on Earth: Textbook: Exercise Physiology in Canada, First Edition. Publisher: McGraw-Hill. (Invited contribution)
3. Bakker A, **Ainslie PN** (2012) Transcranial Doppler Duplex ultrasound. In: *Human Ultrasonography* (ISBN: 978-953-307-652-2) Ed: Ainslie PN. Intech., New York (In Press)
4. Smith K, Bakker A, Smith, B, **Ainslie PN** (2012) Utility of near-infrared spectroscopy as a vascular tool. In: *Human Ultrasonography* (ISBN: 978-953-307-652-2) Ed: Ainslie PN. Intech., New York (In Press)
5. Willie CK, Eller L, **Ainslie PN** (2012) New Directions in transcranial Doppler ultrasound. In: *Human Ultrasonography* (ISBN: 978-953-307-652-2) Ed: Ainslie PN. Intech., New York (In Press)
6. Koelwyn GJ, Currie KD, MacDonald M, **Eves ND**. Ultrasonography and Tonometry for the Assessment of Human Arterial Stiffness, Applied Aspects of Ultrasonography in Humans, Ainslie PN (Ed.), ISBN: 978-953-51-0522-0, InTech, 2012.
7. **Ainslie PN**, Wilson M, Imray C. (2012) The cerebral circulation and brain. In: *High Altitude: An Exploration of Human Adaptation*. Eds: Eric Swenson and Peter Bartsch. M. Dekker, Inc., New York & Basel. In press.

**FUNDING SUMMARY (01/11-07/12) – Total: \$10,610,427****Career Awards and Research Chairs (\$1,135,000)**

1. Ainslie PN – Canada Research Chair in Cerebrovascular Physiology, \$500,000, 2011-2016.
2. Eves ND – Michael Smith Foundation for Health Research – Clinical Scholar Award, \$635,000, 2011-2019.

**Infrastructure Grants (\$314,000)**

3. Ainslie PN – Integrative Cerebrovascular Physiology Laboratory – Canadian Foundation for Innovation, \$162,000, 2011-2016.
4. Ainslie PN – Integrative Cerebrovascular Physiology Laboratory – British Columbia Knowledge Foundation, \$162,000, 2011-2016.

**Primary Operating Grants (from a total of \$800,235) as Principal or Co-Principal Investigator – see CV's for further details.**

5. Ainslie PN – Interactions between the brain and lungs – NSERC Discovery Grant, \$208,000, 2010-2013.
6. Ainslie PN – Post Doctoral Research Fellow – NSERC Accelerator Supplement, \$120,000, 2010-2013
7. Ainslie PN – Human Environmental Chamber – NSERC RTI, \$143,000, 2011-2012.
8. Ainslie PN - Physical activity, obesity and obstructive sleep apnea - Canadian Institutes of Health Research, \$99,000, 2010-2011
9. Eves ND - Vascular-Ventricular Coupling Following Anthracycline-Containing Chemotherapy in Operable Breast Cancer. \$96,235, 2012-2014.

**Primary Operating Grants as Co-Investigator (from a total of \$7,809,192) – see CV's for further details.**

10. Ainslie PN – Mechanisms of Dynamic Cerebral Autoregulation. Health Research Council of New Zealand, \$500,000 (NZD), 2011-2015.
11. Eves ND - Randomized Trial of Optimal Timing of Aerobic Training in Breast Cancer. National Institute of Health (R01), \$2,558,860 (USD), 2012-2017
12. Eves ND - Randomized Trial of Optimal Type of Aerobic Training in Breast Cancer. National Institute of Health (R01), \$2,230,433 (USD), 2010-2015
13. Eves ND - Phase III Trial of Exercise Training in Postsurgical Lung Cancer. National Institute of Health (R01), \$1,803,899 (USD), 2009-2014

**Funding of Undergraduate and Graduate Students and PDF's (\$552,000)**

1. Anthony Bain, PhD student. **Awards received:** NSERC Alexander Graham Bell Canada Graduate Scholarship 2012-2015 (20k/year), University of British Columbia Graduate Scholarship and Entrance Scholarship 2012-2013 (12k).
2. Kurt Smith, PhD student, **Awards received:** NSERC Alexander Graham Bell Canada Graduate Scholarship 2012-2015 (20k/year), University of British Columbia Graduate Scholarship 2012-2013 (6k).
3. Chris Willie, PhD student. **Awards received:** Vanier Scholarship 2011-2014 (50k/year), NSERC André Hamer Prize 2011 (15k), NSERC Alexander Graham Bell Canada Graduate Scholarship 2011 (Declined), Izaak Walter Killam Memorial Doctoral Scholarship 2011 (Declined), University of British Columbia Graduate Scholarship 2012-2013 (6k).
4. Kit Marsden, MSc Student. **Award received:** NSERC Graduate Scholarship 2011-12, \$17k, University of British Columbia Graduate Scholarship 2012-2013 (3k).
5. Brittney Nelson, Undergraduate Student. **Award received:** Faculty of Health and Social Development Undergraduate Research Summer Award 2012-2013 (\$6k).
6. Ayla Graham, Undergraduate Student. **Award received:** Faculty of Health and Social Development Undergraduate Research Summer Award 2012-2013 (\$6k).
7. Graeme Koelwyn, MSc student. **Awards received:** Canadian Institute of Health Research CGS-MSFSS travel award 2011-2012 (\$6k), Canadian Institute of Health Research Banting and Best Masters Scholarship 2010-2011 (\$17.5k), Bill Tymchuk Cancer Research Award 2011-2013 (\$2k).
8. Sarah Perry, MSc student. **Award received:** Canadian Institute of Health Research Banting and Best Masters Scholarship 2010-2011 (\$17.5k).
9. Zainisha Vasani, PhD student. **Award received:** Alberta Heritage Doctoral Award 2009-2011 (\$25k/yr).
10. Nia Lewis, PhD (Post-Doctoral Fellow). **Award received:** Focus on Stroke Research Fellowship award 2012-2014 (\$40k/yr).
11. Shawnda Morrison (Post-Doctoral Fellow). **Award received:** Michael Smith Foundation for Health Research Fellowship award 2012-2014, (\$45k/yr).
12. Jinelle Gelinas, MSc program, **Award received:** British Columbia Graduate Scholarship 2012-2013 (3k).

**Selection of Invited Presentations (2011-2012) – see CV's for further details**

- 1) **Ainslie PN** – Reliance of cerebral blood flow on blood pressure. American Association of Anesthesiologists, Chicago, USA (2011)
- 2) **Ainslie PN** – How the brain controls breathing. CHEST, Hawaii, USA (2011)
- 3) **Eves ND** - Exercise Training for the Modification of Disease and the Prevention of Secondary Co-Morbidities. Symposium: Managing and Preventing Chronic Disease – An Emerging Role for Sports Medicine Practitioners. Canadian Academy of Sport and Exercise Medicine Conference, Kelowna, British Columbia (2012).

- 4) **Eves ND** - Optimizing the Exercise Prescription for People with Pulmonary Disease. CSEP Health Professionals of British Columbia, Annual Conferences. Vancouver, British Columbia (2012).
- 5) **Eves ND** - Exercise Recommendations for Persons Living with Pulmonary Conditions. Consensus Meeting: The development of exercise prescriptions for prominent medical conditions: An international consensus meeting funded by the Canadian Institutes of Health Research the Physical Activity line and the Health and Fitness Program of BC. Vancouver, British Columbia (2012)
- 6) **Eves ND** - Tailoring exercise for patients with COPD. CSEP Perspectives in Exercise Health Conference, Kananaskis, Alberta (2011)
- 7) **Eves ND** - Exercise as an Anti-Inflammatory Therapy In the Treatment of COPD. Pulmonary Medicine Rounds, Division of Respiratory Medicine, St. Paul's Hospital, University of British Columbia, May 2012.
- 8) **Eves ND** – Exercise and the Lung Cancer Continuum. Thoracic Rounds. Faculty of Medicine, University of British Columbia and the Kelowna General Hospital, October 2011.
- 9) **Eves ND** - Dyspnea and COPD: What are the Mechanisms and How do we Relieve it? Okanagan Respiratory Group Sponsored by Nycomed and Merck Frost, Kelowna. October 12<sup>th</sup> 2011
- 10) **Eves ND** - Strategies for Optimizing Exercise in Patients with COPD. C.O.A.C.H.'s 5th Annual Healthcare Professional Development Day, Kelowna. October 1<sup>st</sup> 2011

#### **Mentorship of Highly Qualified Personnel (01/11-07/12):**

- 1) Shawnda Morrison (Post Doctoral Fellow), School of Health and Exercise Sciences. Title: Role of cerebral blood flow in the pathophysiology of sleep apnea.
- 2) Anthony Bain, PhD student, School of Health and Exercise Sciences (Ainslie). Title: Influence of temperature on brain blood flow regulation.
- 3) Ayla Graham, Undergraduate Student, School of Health and Exercise Sciences (Eves). Title: The effect of dynamic hyperinflation on cardiovascular function in patients with chronic obstructive pulmonary disease.
- 4) Brittney Nelson, Undergraduate Student (Ainslie/Eves). Title: Alterations in cerebrovascular function in patients with chronic obstructive pulmonary disease.
- 5) Jinelle Gelinias, MSc program, School of Health and Exercise Sciences (Eves/Ainslie). Title: Effect of exercise training on peripheral and cerebrovascular function in patients with COPD.
- 6) Kit Marsden, MSc Program, School of Health and Exercise Sciences (Ainslie). Title: Relationship between pulmonary pressures and cerebrovascular function
- 7) Graeme Koelwyn, MSc program, School of Health and Exercise Sciences (Eves). Title: Vascular-Ventricular Coupling Following Anthracycline-Containing Chemotherapy in Operable Breast Cancer.
- 8) Kurt Smith, PhD program, School of Health and Exercise Sciences (Ainslie/Eves). Title: The effect of blood pressure and oxygen on cerebral blood flow regulation..
- 9) Chris Willie, PhD program, School of Health and Exercise Sciences (Ainslie). Title: The effect of carbon dioxide on cerebral blood flow regulation.
- 10) Nia Lewis, PhD (Post-Doctoral Fellowship), School of Health and Exercise Sciences, (Ainslie/Eves). Title: Sex differences in vascular and cerebrovascular function in COPD: benefits of exercise.
- 11) Erik Groves, PhD program, Faculty of Kinesiology (Eves - Supervisory Committee Member). Title: A Novel Physiological Model Examining the Tolerance to Exercise Above Maximal Lactate Steady State. Defended June 18<sup>th</sup> 2012.

- 12) Sarah Perry, MSc program, School of Health and Exercise Sciences (Eves, Ainslie - Supervisory Committee Member). Title: The effect of different interventions on the sensory and affective dimensions of dyspnea in patients with COPD during exercise. Defended June 12<sup>th</sup> 2012.
- 13) Zainisha Vasani, PhD program, Faculty of Kinesiology (Eves). Title: Myocardial fibrosis, left ventricular function and aerobic capacity in individuals with type 1 diabetes. Defended May 23<sup>rd</sup> 2012.
- 14) Ondrej Vokoun, Visiting PhD Student for Charles University Prague, Czech Republic (Eves). Title: The effect of lower body negative pressure on the recovery from high intensity exercise. Three month Internship (Feb – May 2012)
- 15) Akke Bakker, Visiting MSc student for University of Amsterdam, The Netherlands (Ainslie). Title: Utility of Transcranial Color Doppler Duplex. Three month Internship (June – Sept 2011)
- 16) Lisa Wong, MSc program, School of Health and Exercise Sciences (Eves, Ainslie - Supervisory Committee Member). Title: The effect of alterations in oxygen content at rest and during exercise on endothelial function. Defended November 3<sup>rd</sup> 2011.
- 17) Jon Smirl, MSc program, Human Kinetics (Ainslie, Eves - Supervisory Committee Member). Title: Cerebral blood flow in cardiac transplant recipients during rest and incremental exercise. Defended August 3<sup>rd</sup> 2011.
- 18) Anna Alywin, MSc program, Faculty of Kinesiology (Eves - Supervisory Committee Member). Title: Maximal strength training improves the economy and sustainability of performance in trained male cyclists. Defended April 28<sup>th</sup> 2011.

**Selection of Media Exposure (01/11-07/12) – See CV's for details:**

1. Ainslie PN – **Research on Everest**; Discovery Channel, May 18
2. Ainslie PN – **The peak of scientific research** – Castanet online news – March 7
3. Ainslie PN - **UBC Okanagan team heads to Everest for high-level tests** – Victoria Times Colonist March 4
4. Ainslie PN - **UBC-led team off to Everest for oxygen study; Researchers to use own bodies to determine impact on function** – Vancouver Sun, March 5 (provincial edition)
5. Ainslie PN - **UBC-led team off to Everest for oxygen study** – Vancouver Sun.com, March 5
6. Ainslie PN - **UBC-led team off to Everest for oxygen study; Researchers to use own bodies to determine impact on function** – Vancouver Sun, March 5 (city edition)
7. Ainslie PN - **UBC Okanagan team heads to Everest for high-level tests** – Vancouversun.com, March 4
8. Ainslie PN - **Peak Performance** – Vancouver Sun, March 5
9. Ainslie PN - **UBC Okanagan reaches new heights with Mount Everest project** – Alaska Highway News, March 6
10. Ainslie PN - **Okanagan students to climb Everest** – Prince George Citizen, March 5
11. Ainslie PN - **Professor leads expedition to Mount Everest lab** – Vernon Daily Courier, March 14
12. Ainslie PN - **Professor leads expedition to Mount Everest lab** – Kelowna Daily Courier, March 14
13. Ainslie PN - **Professor leads expedition to Mount Everest lab** – Vernon Daily Courier, March 12
14. Ainslie PN - **Professor leads expedition to Mount Everest lab** – Kelowna Daily Courier, March 12
15. Ainslie PN - **Researchers prepare for highest lab on Earth** – Windsor Star, March 5



16. Ainslie PN - **Researchers heading to highest lab on Earth** – National Post, March 5 (National Edition)
17. Ainslie PN - **B.C. researchers head to highest lab on Earth; Everest base camp; Scientists to study affects of low oxygen on the body** – National Post, March 5 (Toronto edition)
18. Ainslie PN - **Canadian-led team prepares to work in Earth's highest lab** – Alberni Valley Times, March 5
19. Ainslie PN - **Canadian-led team prepares for Everest lab** – Nanaimo Daily News, March 5
20. Ainslie PN - **Researchers bound for world's highest lab** – March 5, 2012
21. Ainslie PN - **Researchers bound for world's highest lab; Effects of low oxygen levels to be studied** – Edmonton Journal, March 5
22. Ainslie PN - **Researchers prepare for highest lab on Earth** – Windsor Star, March 5
23. Ainslie PN - **Canadian-led team prepares for work in highest laboratory on Earth** – Post Media Regional News BC, March 5
24. Ainslie PN - **Canadian-led team prepares for work in highest laboratory on Earth** – Post Media News March 4
25. Ainslie PN - CHBC Global TV – March 6 newscast
26. Ainslie PN - UBCO-TV – March 5 video news release
27. Ainslie PN - CBC Radio Daybreak – March 7 interviews
28. Eves ND – CBC Radio - **Ralph Klein has COPD.**
29. Eves ND - **The anti-inflammatory effects of exercise in patients with chronic obstructive pulmonary disease.** Michael Smith Foundation for Health Research webpage.
30. Eves ND - **Neil Eves examines influence of exercise on respiratory disease**, UBC Website, Nov 24<sup>th</sup>.
31. Eves ND – **Ground breaking research** –Kelowna Capital News Nov 22<sup>nd</sup>
32. Eves ND - **UBC researcher breaks new ground on COPD** - Nov 17<sup>th</sup> UBC Website.
33. Eves ND - **Researcher aim to improve heart health for breast cancer survivors.** April 29<sup>th</sup> Kelowna Capital news
34. Eves ND - **Researcher aim to improve heart health for breast cancer survivors** – Vernon Daily Courier, April 29<sup>th</sup>
35. Eves ND - **Researcher aim to improve heart health for breast cancer survivors** – April 27<sup>th</sup> UBC website

## **APPENDIX B**

**CONSULTANCY AND FEE FOR SERVICE PRICING: AN ADDITIONAL INCOME SOURCE FOR THE CENTRE OF HEART, LUNG AND VASCULAR HEALTH**

A series of validated and novel screening tests will be offered to the Okanagan public (regardless of their predisposition to atherosclerotic disease) with the specific aim of detecting and subsequently treating disease (eg. through exercise/dietary interventions) in the preclinical (early) stage. The CHLVH will offer two main screening procedures, each with a number of sub-test, that address different aspects of your cardiovascular and respiratory health. These tests may be performed individually, or in combination. All of the tests are non-invasive and involve minimal to no discomfort. These procedures are specifically designed to test various aspects of an individual's "vascular health and fitness". Each test provides another piece of information to build your comprehensive cardiovascular risk assessment, and enables the participant and their physician to determine the optimum individualized course of treatment. Each procedure and related test are briefly summarized below and will be offered at the following prices:

### **Vascular Screening:**

**Blood Sample (\$100):** An overnight fasted sample will be taken to measure a wide number of traditional and novel biomarkers in the blood that ultimately predispose an individual to atherosclerosis, coronary artery disease and diabetes.

**Carotid Artery Intima-Media Thickness (\$200):** This is a stable measure of disease that measures the thickening of the artery walls and can identify focal plaque accumulation.

**Endothelial Function (\$200):** This is a dynamic test of the responsiveness of the arteries to increased blood flow. The arteries of healthy subjects respond better (*ie.* vasodilate more rapidly) than those with underlying vascular disease.

**Ankle Brachial Blood Pressure Index (\$50):** This test measures blood pressure at the ankles and arms to assess the flow of blood throughout the body. Lack of normal perfusion to the feet may indicate a condition known as peripheral vascular disease (PVD), manifest as intermittent claudication.

**24-hour blood pressure monitoring (\$150):** Guidelines published in 2011 by the National Institute for Health and Clinical Excellence (Nice) recommend that patients should be monitored for 24 hours to determine whether they have high blood pressure rather than having a measurement taken in a doctor's surgery. Ambulatory blood pressure monitoring involves wearing a cuff and a box on a belt for 24 hrs. You then bring our device back the following day for the recording to be downloaded on to a computer and an automatic report generated.

**Arterial Stiffness (\$150):** Aging and vascular disease causes blood vessels to become more rigid. This test will assess the "stiffness" of the arterial system and track corresponding changes following lifestyle (eg. an exercise training program or dietary regime) and/or medication changes.

**Neurovascular reactivity (\$250):** This test will examine how responsive the arteries that supply oxygenated blood to the brain are when challenged by acute changes in blood pressure and/or carbon dioxide.

**Vascular package: (\$1,000)**

### **Exercise Performance Screening:**

**Maximal Aerobic Power (VO<sub>2max</sub>) (\$200):** An incremental exercise test to volitional exhaustion, which measures the integrative capacity of the lungs, heart, vasculature and skeletal muscle to transport and utilize oxygen. This test is the gold-standard test for measuring aerobic fitness.

**Lactate threshold testing (\$150):** an incremental exercise test performed with finger prick blood samples which allows the determination of the lactate response to training and allows identification of the anaerobic threshold and appropriate training zones for any individual.

**Critical Speed/Power Testing (\$200):** A battery of three tests that lead to the prediction of the critical speed or power an athlete can maintain during races of different duration. This is a highly sensitive marker of performance and how performance can be altered with different training interventions.

**Blood volume measurements (\$200):** Measurement of blood volume (i.e. red blood cell count and plasma volume) which is critical for the enhancement of aerobic exercise performance.

**Pulmonary Function Screening (\$150):** This test involving spirometry, lung volumes and diffusion capacity can be used for the measurement of lung function and when combined with an exercise or a eucapnic voluntary hyperventilation stimulus can improve the sensitivity of assessing exercise induced bronchoconstriction.

**Exercise package: (\$750)**

#### **Industry Consultancy:**

We will also conduct and offer a number of industrial consultancies in the areas of thermal regulatory stress, clothing performance; hypoxia tolerance, overtraining and exercise programming. Pricing will be determined on an individual bases.