

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN



OKANAGAN SENATE SECRETARIAT Enrolment Services Senate and Curriculum Services

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THE OKANAGAN SENATE

AGENDA

Wednesday 22 September 2010

3:30 pm to 5:30 pm

ART 386 | UBC OKANAGAN CAMPUS

1. Senate Membership (information) - Mr. James Ridge

a. Declarations of Vacancy

One (1) faculty representative of the Faculty of Health and Social Development to replace Dr. Carole Robinson until August 31, 2011 and thereafter until replaced

One (1) faculty representative of the Faculty of Management to replace Dr. Annamma Joy until August 31, 2011 and thereafter until replaced

b. New Members

Ex-Officio

Acting Dean Kenneth Phillips replaced former Dean Robert Belton for the Faculty of Creative and Critical Studies

Dean Lynn Bosetti replaced former Dean Robert Campbell for the Faculty of Education

Dean Mary Courtney replaced former Acting Dean Edward Taylor for the Faculty of Health and Social Development

c. Appointment of Ms. Maria Woodward

That Ms. Maria Woodward replace Mr. Daniel Berry as student representative for the Faculty of Management as recommended by the Student Union of UBC Okanagan until March 31, 2011 and thereafter until replaced.

d. Call for Nominations

One (1) student representative to replace Ms. Stephanie Bertrand to serve on the Nominating Committee until March 31, 2011 and thereafter until a successor is elected

One (1) faculty representative or Dean to replace Dr. Carol Scarff to serve on the Nominating Committee until August 31, 2011 and thereafter until a successor is elected

2. Minutes of Previous Meeting, 19 May 2010 (approval) (circulated - Item 2) - Dr. Doug Owram

3. Business Arising from the Minutes - Dr. Doug Owram

- a. Report back from the Registrar: Fees Associated with VGRS 500 (O) Visiting Graduate Research Student (information) (circulated - Item 3a)

4. Remarks from the President and Related Questions - Professor Stephen Toope

- a. Record of President's Activities (information) (circulated - Item 4a)

5. Deputy Vice-Chancellor's Remarks - Dr. Doug Owram

6. From the Board of Governors - Dr. Doug Owram

Confirmation that the following items approved by the Okanagan Senate were subsequently approved by the Board of Governors as required under the *University Act* (information)

Senate Meeting of 28 April 2010

Curriculum proposals from the Faculties of Applied Science, Arts and Sciences, Creative and Critical Studies, Education, Health and Social Development, and Management.

Approval of new and discontinued awards.

Senate Meeting of 19 May 2010

Curriculum proposals from the Faculties of Applied Science, Arts and Sciences, Health and Social Development, and the College of Graduate Studies.

Approval of new awards.

7. Admissions and Awards Committee - Dr. Sharon McCoubrey

- a. New Award (approval) (circulated – Item 7a)
- b. Admissions Proposals (approval) (circulated – Item 7b)
 - i. Application and Document Deadlines
 - ii. ELAS, English Language Proficiency Tests
 - iii. Applicants Following the BC/Yukon High School Curriculum, Admission Requirements
 - iv. Advanced Credit or Placement
 - v. Applicants from a College or University
- c. Practice on Admissions Decisions Involving Dean’s Discretion (information) (circulated – Item 7c)

8. Joint Report of the Admissions and Awards Committee and the Curriculum Committee - Dean Marvin Krank

Environmental Chemistry Honours Program (approval) (circulated – Item 8)

9. Learning and Research Committee - Dr. Peter Arthur

- a. Emerita Status (approval) (circulated – Item 9a)
- b. Establishment of the Institute for Species at Risk and Habitat Studies (SARHS) (approval) (circulated – Item 9b)

10. Nominating Committee - Dr. Mercedes Duran-Cogan

- a. Senator Committee Appointments (approval) (circulated – Item 10a)
- b. Appointment of Okanagan Senate Representative to President’s Advisory Committee to Consider an Extension of the Appointment of the Vice-President, Research & International (approval) (circulated – Item 10b)

11. Other Business

Regrets: Kelly Ross (250) 807-9259 or email kelly.ross@ubc.ca
UBC Senates and Council of Senates website www.senate.ubc.ca

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THE OKANAGAN SENATE

MINUTES - **draft**

Wednesday May 19, 2010

SCI 333 | UBC OKANAGAN CAMPUS

Attendance:

Present: Dr. P. Arthur (Acting Chair), Mr. F. Vogt (Acting Secretary), Dr. A. Abd-El-Aziz (Provost and Vice-Principal), Dr. P. Balcaen, Dean R. Belton, Ms. M. Burton, Mr. N. Cadger, Dean R. Campbell, Dr. J. Cioe, Dr. F. de Scally, Ms. L. Driscoll, Dr. J. Holzman, Dr. G. Jones, Mr. S. Joseph, Dr. D. Keyes, Dean M. Krank, Dr. R. Lalonde, Ms. E. Landry, Dr. S. McCoubrey, Acting Dean C. Mathieson, Dr. B. Nilson, Dr. B. O'Connor, Dr. G. Pandher, Ms. L. Patterson, Dr. C. Robinson, Ms. L. Super, Acting Dean E. Taylor, Ms. A. Weiss, Dr. S. Yannacopoulos

Guests: Dr. B. Bauer, Ms. L. Collins, Ms. N. Hager

Regrets: Dean T. Aboulnasr, Mr. D. Berry, Dr. J. Castricano, Dr. J. Cheng, Dr. M. Duran-Cogan, Dr. C. Hodge, Mr. A. Hu, Dr. J. Johnson, Dr. A. Joy, Ms. S. Larose, Ms. M. Laviolette, Dr. G. Lovegrove, Dr. R. Mack, Ms. S. Morgan-Silvester (Chancellor), Dean D. Muzyka, Dr. H. Najjaran, Mr. C. Norman, Dr. D. Owram, Mr. B. Paton, Dr. M. Rheault, Mr. J. Ridge (Associate Vice-President, Enrolment Services and Registrar), Dr. B. Schulz-Cruz, Prof. S. J. Toope (President and Vice-Chancellor), Mr. D. Vineberg, Mr. C. Wain, Ms. G. Zilm

Recording Secretary: Ms. K. Ross

Call to Order

In the absence of the President and the Vice-Chair, Acting Chair Dr. Arthur called to order the ninth and final regular meeting of the Senate for the 2009/2010 academic year.

Senate Membership

Following an earlier call for nominations and according to the *Rules and Procedures of Senate, Section 23 (e)*, the Acting Secretary declared Student Senator Ms. Emily Landry acclaimed as elected to serve on the Nominating Committee until March 31, 2011 and thereafter until replaced.

Calls for Nominations

The Acting Secretary issued a second call for nominations for one (1) student representative to serve on the Nominating Committee until March 31, 2011 and thereafter until replaced.

The Acting Secretary issued a third call for nominations for one (1) faculty representative to replace Dr. Carol Scarff on the Nominating Committee until August 31, 2011 and thereafter until replaced.

Minutes of the Previous Meeting, April 28, 2010

Moved: Dr. Lalonde

Seconded: Dr. Cioe

That the minutes of the Okanagan Senate Meeting of April 28, 2010 be adopted as presented.

The motion was put and carried.

Granting of Degrees

Acting Chair Dr. Arthur called for the following motion:

Moved: Dean Krank

Seconded: Dr. Cioe

That the candidates for degrees, as recommended by the Faculties and the College of Graduate Studies, be granted the degrees for which they were recommended, effective May 2010, and that a committee composed of the Registrar, the appropriate Dean(s), and the Chair of the Okanagan Senate, be empowered to make any necessary adjustments (2/3 majority required).

Discussion

Dr. Yannacopoulos proposed the following amendment (shown underlined):

That the candidates for degrees, as recommended by the Faculties and the College of Graduate Studies, be granted the degrees for which they were recommended, effective May 2010, and that a committee composed of the Registrar, the appropriate Dean(s) or their appointed delegates, and the Chair of the Okanagan Senate, be empowered to make any necessary adjustments (2/3 majority required).

The amendment was accepted by unanimous consent.

The amended motion was put and carried by the required 2/3 majority.

Academic Building and Resources Committee/Council of Senates Budget Committee, Okanagan Sub-committee

Committee Chair Dr. Daniel Keyes presented the report.

Oral Report on Committee Activities

Dr. Keyes reported that the Committee had been satisfied with the 2010 Budget as presented by the Deputy Vice-Chancellor and Principal. He highlighted that the budget reflected increased faculty hiring and replacements in areas of rising enrolment. Dr. Keyes noted that over the next year the Committee would likely discuss whether enrolment growth should be managed according to the enrolment demands for each program or by the availability of teaching and laboratory space. Dr. Keyes noted that as Chair of the Okanagan Sub-committee of the Council of Senates Budget Committee, he served alongside Vancouver Councilors on the full Council of Senates Budget Committee.

Dr. Keyes noted that beyond budgetary issues, the Committee had considered three specific areas as follows:

1. Sustainable Campus Development

Dr. Keyes summarized that Ms. Podger, Associate Vice-President, Administration and Finance at the UBC Okanagan campus, had provided an overview of aspects sustainable campus development such as various green initiatives. A comparative analysis had been conducted on the value of those initiatives which concluded that exploring partnerships with the City of Kelowna could be a priority.

2. Teaching Spaces Survey

Dr. Keyes reported that in response to a joint request by the Academic Building and Resources Committee and the Learning and Research Committee, the Senate Secretariat had circulated and compiled a survey which assisted the Committee to

prioritize a list of teaching spaces on the Okanagan campus. The Committees agreed that in order to sustain rising enrolment, older teaching spaces should be renovated so as to increase the total useable teaching space on campus.

Dr. Keyes noted, however, that renovation projects would be unlikely due to the reduced provincial budget; he added that the Academic Building and Resources and the Learning and Research Committees would continue to jointly work on this item in 2010/2011.

3. Completion of New Buildings

Dr. Keyes noted that the lecture and laboratory spaces in the Arts and Science Building 2 would likely be completed in September 2010, while those spaces in the Engineering, Management and Education Building had been scheduled to open in September 2011. The Academic Building and Resources Committee and the Learning and Research Committee had observed rather high ratios of faculty offices to teaching spaces in both of those buildings, which would be analyzed over the next year.

Dr. Keyes highlighted that the Committee, with support from Ms. Podger, would coordinate efforts over the next year to increase, above and beyond the standards specified in the British Columbia Building Code, the mobility of individuals visiting and/or working at the Okanagan campus.

Academic Policy Committee

Committee Chair Dr. Jan Cioe presented the report.

Endorsement of Memorandum on Interdisciplinary Graduate Studies and the Recently Approved College of Graduate Studies Governance Structure

The following is an excerpt from the memorandum:

On April 28th 2010 Senate approved a governance structure for the College Graduate Studies (COGs) that clearly delineated the division between the duties and responsibilities of the COGs and Faculties. A footnote in “06a O-4 Governance of COGs package” notes “Faculties in these references shall be taken to include the Interdisciplinary Graduate Studies Program for the purposes of the administration of the program” (14). The following defines how IGS operates as a program within COGs and how in select number of administrative aspects it operates like a faculty. If Academic Policy deems it necessary to codify this relationship as policy, it is free to adapt the statements below that reflect the current state of IGS/COGs relationship.

Faculty Feature

IGS’s reporting structure, whereby the director reports directly to the Provost while consulting with the Dean of COGs, gives it a faculty-like feature.

On April 7th 2010, COGs delegated to the newly constituted IGS committee the ability to set and review its program's policy, manage awards and scholarship, and manage its curriculum like any other faculty.

IGS relies on other faculties' ability to assess applicants, but ultimately IGS makes recommendation to COGs for admissions.

Program Features

This committee operates within COGs as a subcommittee of COGs (see the governance structure below in the Appendix). Decisions made by the IGS committee continue to flow through to COGs. In the case of curriculum as with all Graduate level curriculum, new and revised IGS courses and themes approved by IGS council will flow through COGs to Senate's Curriculum committee.

Unlike other faculties, IGS relies on other faculties via its unit and departmental program coordinator for faculty level funding, space and human resources for program delivery. Given the integration of COGs and IGS website and reliance on COGs for administrative assistance, IGS will continue to draw on COGs for clerical support.

Dr. Cioe reported that Dr. Keyes, Acting Director of Interdisciplinary Graduate Studies (IGS) and Dean Krank of the College of Graduate Studies (COGS), had agreed to the governance structure as outlined in the memorandum.

Moved: Dr. Cioe
Seconded: Dean Krank

That Senate receive and endorse the Memorandum on Interdisciplinary Graduate Studies and the Recently Approved College of Graduate Studies Governance Structure.

The motion was put and carried.

Revision of Policy O-4: Governance of the College of Graduate Studies

Dr. Cioe summarized that in April 2010 Senate had approved Policy 0-4: *Governance of the College of Graduate Studies*, and had directed the Academic Policy Committee to review Section 5(a)(i) (sections relating to the apportionment of faculty member representation on the Graduate Council) and make a recommendation therein to Senate .

The Academic Policy Committee proposed the following revisions to Section 5(a): *The Graduate Council*:

Membership and Terms of Office

- i. The *Graduate Council*'s voting membership is as follows:
1. Dean of the *College of Graduate Studies*;
 2. President;
 3. Deputy Vice-Chancellor;
 4. University Librarian or his or her designate;
 5. Provost;
 6. Associate Vice-President, Learning Services;
 7. Deans of Faculties or his or her designate;
 8. Director of Interdisciplinary Graduate Studies;
 9. **Nineteen (19)** Faculty members, apportioned as follows:
 - a. Eight (8) ~~Six (6)~~ from the Faculty of Arts & Sciences, ~~with one from each academic unit therein;~~
 - b. **Three (3) each from the faculties of Applied Science and Creative & Critical Studies;**
 - c. **Two (2) each from the faculties of Education and Health & Social Development; and**
 - d. **One (1) from the Faculty of Management**
 - e. ~~Two (2) from Faculty of Creative & Critical Studies, with one from each department therein;~~
 - f. ~~One (1) each from the faculties of Applied Science, Education, Management, and Health & Social Development;~~
 10. Student members, apportioned as follows provided that no more than one student may be registered in each faculty:
 - a. Two (2) doctoral students elected by and from the doctoral students; and
 - b. Two (2) master's students elected by and from the master's students.
- ii. The Registrar or his or her designate and the Director of Graduate Administration shall be non-voting members of the *Graduate Council*.
- iii. Faculty members serving under Section 5 (a)(i)(9) shall be appointed in a manner specified and under such terms **and further apportionments** as decided upon by their respective faculties.
- iv. **The apportionment of faculty members under Section 5 (a)(i)(9) shall be reviewed by the responsible committee every triennium, such a review shall be in consultation with the Graduate Council and the faculties and take into consideration the distribution of graduate students and faculty members across the faculties.**

Moved: Dr. Cioe
 Seconded: Dean Krank

That Section 5 of Policy 0-4 be amended as set out above.

Discussion

In response to Dr. Robinson's request for clarification of the model used to determine the apportionment of faculty representation on the Graduate Council, Dean Krank explained that several models had been examined by the Committee and that the model agreed upon by the Committee was also currently in use by UBC Vancouver's Faculty of Graduate Studies' Graduate Council.

Responding to a question from Dr. Jones, Dean Krank confirmed that all graduate students enrolled in a thesis course were calculated as full-time equivalents (FTEs) and added that the number of courses taken per term by full-time, part-time, and summer students was used to calculate the number of FTEs.

Dr. Lalonde asked whether the apportionment of faculty members ought to be reviewed more often than every triennium, notably during periods of growth. Ms. Collins was recognized by the assembly. She clarified that although Section 5(a)(iv) stated that the apportionment of faculty members under Section 5(a)(i)(9) "shall be reviewed by the responsible every triennium" it did not specify when during the triennium the review must occur. The Academic Policy Committee might, as the responsible committee, determine that due to significant growth in one or more of the faculties a review of the Graduate Studies Council membership should be conducted in the first year of the following triennium.

The motion was put and carried.

Admissions and Awards Committee

Committee Chair Dr. McCoubrey presented the report.

Enrolment Targets

Dr. McCoubrey noted that as per Section 27(2)(r) of the *University Act*, and under their terms of reference, the Admissions and Awards Committee was responsible for recommending to Senate annual enrolment targets by faculty, program, and year for new and continuing students. She explained that due to the continued and rapid growth of the Okanagan campus, targets were unavailable in 2010. Dr. McCoubrey remained hopeful that the Committee, in conjunction with the Enrolment Management Steering Committee, would review and recommend to Senate enrolment targets for 2011/2012.

Dr. Cioe echoed Dr. McCoubrey's hope that enrolment targets would be received and approved by Senate in 2011.

New Awards

See also, 'Appendix A: New Awards'

Moved: Dr. McCoubrey
Seconded: Dr. Robinson

That Senate accept the new awards as listed and forward them to the Board of Governors for approval; and that letters of thanks be sent to the donors.

Discussion

Dr. Keyes questioned the criteria for eligibility for the Henderson Award in International Development. Dr. de Scally observed that students in all faculties might be involved in international health and/or international community development initiatives, not only students from the Faculty of Health and Social Development. He suggested that the award terms specify that students from all faculties be eligible.

Dr. McCoubrey agreed that while the award should not exclude students enrolled in other faculties, she noted that the award was granted on the recommendation of the Faculty of Health and Social Development in consultation with Go Global and the College of Graduate Studies. Dr. McCoubrey and Dean Krank confirmed that the College of Graduate Studies would be consulted in the event that a graduate student had been recommended by the Faculty of Health and Social Development.

Dr. Robinson suggested that clarification be sought from the donor, and that the Henderson Award in International Development be divided from the proposed new awards package and be referred to the Admissions and Awards Committee.

Motion to Divide

Moved: Dr. de Scally
Seconded: Mr. Cadger

That the Henderson Award in International Development be divided from the main motion for separate consideration.

The motion was put and carried.

Discussion on the Henderson Award in International Development

By consent, the assembly agreed to refer the Henderson Award in International Development to the Admissions and Awards Committee for further consideration.

Discussion on the Main Motion

In response to a question from Dr. de Scally, Dr. McCoubrey confirmed that the Donna Elliott Memorial Entrance Scholarship in Nursing would be offered primarily based on

academic achievement based on the following criterion for scholarships and prizes awarded at The University of British Columbia:

Scholarships & prizes (see:

<http://okanagan.students.ubc.ca/finance/awards.cfm?go=scholarships>)

Merit-based awards, such as scholarships and prizes, are offered mainly based on your academic performance. Most will not require that you indicate financial need, although there are a number that combine need and merit. Scholarships and prizes are provided by the University and by many other donors, including the government, community organizations and corporations.

Scholarships are awarded primarily for academic achievement but some may require achievement in other areas such as leadership, community service, artistic endeavours and athletics. Typically, they will be offered based on achievements in the preceding school year and will be awarded at the beginning of the Winter session. Scholarships are applied to tuition first.

While "award" may refer to many types of academic funding, it may also refer to a specific category. Awards have an academic requirement but will also emphasize community involvement or other non-academic qualifications. They may be awarded at the beginning of the year, like a scholarship, or at the end of the year, like a prize, depending on the intent of the award.

Prizes are awarded based on academic achievement at the end of a session. They may be awarded on the basis of performance in a specific course, best student in the program or for some other specified characteristic. Prizes are awarded at the end of the session and recipients are not required to return to UBC in order to receive them. Some prizes have a monetary award while others may be in the form of a book or medal.

Most scholarships, awards and prizes at UBC **do not require an application form or nomination**. UBC faculties and departments make recommendations and the University contacts the recipients.

For minimum scholarship course load requirements, please see the [UBC Senate Regulations Governing University Awards](#).

The main motion was approved.

Admissions Proposals

Three admissions proposals were presented:

- i. **Bachelor of Human Kinetics – Admission Requirements; and Specific Program Requirements for Applicants Following the BC/Yukon Secondary School Curriculum (Math)**

The proposal was to modify the Bachelor of Human Kinetics admission criteria, based on new BC high school mathematics curriculum.

ii. **School of Engineering: Bachelor of Applied Science Program (Admission from Camosun Bridging Program)**

The proposal was to modify the Bachelor of Applied Science program admission requirements to reflect current practice and inform students coming via the Camosun Bridging program that they will be required to take extra courses which will normally require them to complete five (5) terms of coursework at UBC Okanagan.

iii. **Student Declaration**

The proposal was to remove reference to the Association of Universities and Colleges of Canada (AUCC) and clarify of current language on disclosure of information on the UBC Application Form for Undergraduate Admission.

Moved: Dr. McCoubrey

Seconded: Acting Dean Mathieson

That Senate approve the proposed changes to the Bachelor of Human Kinetics – Admission Requirements; and Specific Program Requirements for Applicants Following the BC/Yukon Secondary School Curriculum to the Bachelor of Human Kinetics in the Faculty of Health and Social Development;

And

That Senate approve the proposed changes to the School of Engineering: Bachelor of Applied Science Program (Admission from Camosun Bridging Program);

And

That Senate approve the revised Calendar entry: UBC Admissions Student Declaration.

The motion was put and carried.

Annual Report on Admissions Appeals

For information and on behalf of the Committee, Chair Dr. McCoubrey presented the Annual Report on appeals on applications for admission and readmission to programs: between May 1, 2009 and April 30, 2010 ten (10) student appeals for admission to a degree program had been heard. Of those appeals, five (5) were allowed and five (5) were dismissed.

Appeals of Standing and Discipline Committee

Committee Chair Mr. Cadger presented the report.

Annual Report on Committee Activities

The Committee had circulated for information the Annual Report on Student Discipline. Since May of 2009, one (1) academic misconduct appeal had been heard, which was dismissed; one (1) academic standing appeal had been heard, which was allowed. Of the five (5) non-academic misconduct appeals heard: three (3) were allowed, two (2) were dismissed.

Discussion

Dr. Cioe expressed his gratitude for the useful format of the annual report.

Curriculum Committee

Committee Chair Dean Campbell presented the report.

See also, 'Appendix B: Curriculum Summary'.

Moved: Dean Campbell

Seconded: Mr. Joseph

That Senate approve the new and revised courses and programs brought forward by the Faculties of Applied Science, Arts and Sciences, Health and Social Development, and the College of Graduate Studies as set out in the attached proposals.

Discussion

Dr. Cioe raised the issue of fees associated with the proposed zero-credit course: *VGRS 500: Visiting Graduate Research Student*. Although Dr. Cioe agreed in principle with the rationale, he was concerned that visiting students registered in this course may not attain value for its cost. Dean Belton reported that according to the 2010/2011 UBC Okanagan Calendar students registered in a zero-credit course would be assessed for fees at one (1) credit. The Curriculum Committee was directed to report back to Senate in September 2010 on the actual cost of the course.

The motion was put and carried.

Nominating Committee

Committee Member Dr. Cioe presented the report.

Council of Senates Membership Adjustments: Student Senators

Moved: Dr. Cioe

Seconded: Ms. Landry

That Senate elect the following student to the Council of Senates under the

University Act, S. 38.1(1)(f) for a three-year term: Mr. Calvin Wain;

And

That Senate elect the following student (who must be a graduate student) to the Council of Senates under the University Act, S. 38.1(1)(f) for a three-year term: Ms. Laura Super;

And

That Senate appoint the following student to the Council of Senates Okanagan appointed Student Senator to replace Ms. Rachael L'Orsa as representative of Okanagan Senate Committee Five under the University Act, S. 38.1(1)(i): Mr. Cecil Norman.

The motion was put and carried.

2009/2010 Annual Report from the Okanagan Sustainability Institute (OSI)

The assembly recognized Dr. Bernard Bauer, Director of the Okanagan Sustainability Institute (OSI).

Dr. Bauer recalled that the OSI had been approved by Senate in December 2006, and that since that time the OSI has been challenged to recruit and retain a full-time Director. While interim leadership had forged key relationships with the City of Kelowna and the Central Okanagan Regional District, formal agreements had not been signed. Dr. Bauer reported that in July 2009, he had been appointed as the first full-time Director for a one-year term ending on June 30, 2010.

Dr. Bauer addressed strategies adopted for the OSI including the engagement of faculty members at the UBC Okanagan campus and their specific research areas in relationship with external community partners. The objective was to generate opportunities for working relationships between interested participants that might not otherwise exist while working in isolation.

Dr. Bauer outlined four research proposals that had been developed and submitted under the OSI in the past year including: *Preparing for an Uncertain Water Future in Nepal through Sustainable Storage Development*; *Wild Predator Loss Prevention – Mitigation Project*; *A Comparative International Assessment of the Adaptive Capacities of Water Resources Management Systems in Response to Climate Change Stressors*; and *Toward a Sustainable Agricultural Future – The Okanagan Case*. Dr. Bauer was pleased to report that the OSI had developed further proposals to engage further community groups, non-government organizations, and the University of Washington.

Discussion

In response to a question from Dr. Cioe, Dr. Bauer reported that a three-year collaborative research effort had recently begun between water modelers and resource managers from the OSI, the Okanagan Basin Water Board, the North Central Washington

Research Conservation and Development District (USDA), and the University of Washington.

Dr. Bauer stated that he and a group of faculty members from programs such as Anthropology, Indigenous Studies, and Sociology had recently met with respect to cultural sustainability in the Okanagan. Dr. Bauer confirmed that the theme of sustainability included multiple faculties and extended far beyond environmental impacts.

Adjournment

There being no further business, the meeting was adjourned. The first regular meeting of the Senate for the 2010-2011 academic year was scheduled for Wednesday September 22, 2010 at 3:30 pm to 5:30 pm in ART 386.

**Regrets: Kelly Ross (250) 807-9259 or email kelly.ross@ubc.ca
UBC Senates and Council of Senates website www.senate.ubc.ca**

Appendix A: New Awards

Donna Elliott Memorial Entrance Scholarship in Nursing: A \$1,000 scholarship has been endowed by family, friends, and colleagues of Donna Elliott for a student entering the School of Nursing in the Faculty of Health and Social Development at The University of British Columbia Okanagan from secondary school, with preference given to a student entering from a secondary school in the central Okanagan region. The scholarship is established in loving memory of Donna Elliott, whose compassion and excellence during 28 years in nursing at Kelowna General Hospital exemplified this caring profession. (First award available for the 2010/11 Winter Session)

UBC Okanagan Alumni Bursary: Bursaries totalling \$1,000 are offered by alumni and friends for third or fourth year students at The University of British Columbia Okanagan. (First awards available for the 2010/11 Winter Session)

Henderson Award in International Development (NOTE: DIVIDED FROM THE ITEMS FOR SENATE APPROVAL AND REFERRED TO THE ADMISSIONS AND AWARDS COMMITTEE): A \$1,000 award is offered by the Henderson family through the Shuswap Community Foundation to an undergraduate or graduate student at The University of British Columbia Okanagan who is involved in international health and/or international community development initiatives, with preference given to an international student. The award is made on the recommendation of the Faculty of Health and Social Development in consultation with Go Global and the College of Graduate Studies. (First award available for the 2010/11 Winter Session)

Appendix B: Curriculum Summary

From the Faculty of Applied Science

1. The following new courses:
 - a. ENGR 342 (3) Open Channel Flow
 - b. ENGR 516 (3) Advanced Manufacturing
 - c. ENGR 575 (3) Analytical Techniques in Materials Characterization
 - d. ENGR 576 (3) Mechanical Behaviour of Solids
 - e. ENGR 577 (3) Theory of Elasticity and Plasticity
 - f. ENGR 579 (3) Combustion
 - g. ENGR 585 (3) Turbulence
 - h. ENGR 590 (3) Advanced Fluid Mechanics
 - i. ENGR 595 (3) Solidification: Science and Processing

From the Faculty of Arts and Sciences

2. The following new courses:
 - a. ANTH 425 (3) Seminar in Medical Anthropology
 - b. GEOG 421 (3) Geography of Food Systems

From the Faculty of Health and Social Development

3. The following new courses:
 - a. HMKN 313 (3) Exercise Metabolism
 - b. HMKN 314 (3) Body Composition
 - c. HMKN 400 (3) Ethics for Health Practitioners
 - d. HMKN 401 (3) Community Placement Experience
 - e. HMKN 411 (3) Environmental Physiology
 - f. HMKN 412 (3) Neuromuscular Physiology
 - g. HMKN 413 (3) Cortical Control of Movement
 - h. HMKN 414 (3) Advanced Circulatory Physiology
 - i. HMKN 422 (3) Health Promotion II: Applications
 - j. HMKN 423 (3) Applied Nutrition: Exercise and Chronic Disease
 - k. HMKN 431 (3) Exercise Rehabilitation for Clinical Disorders of Aging
 - l. HMKN 501 (3) Colloquium in Exercise Sciences

From the College of Graduate Studies

4. The following new course:
 - a. VGRS 599 Visiting Graduate Research Students
5. The following revised Interdisciplinary Graduate Studies theme:
 - a. Health and Exercise Sciences

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September 22, 2010

To: Okanagan Senate

From: Mr. James Ridge, Registrar and Associate Vice-President, Enrolment Services

Subject: Fees Associated with VGRS 599 (0): Visiting Graduate Research Students (information)

This memorandum responds to the May 2010 Senate inquiry into fees associated with the zero-credit graduate course VGRS 599: Visiting Graduate Research Students, and the parallel zero-credit undergraduate course VURS 499: Visiting Undergraduate Research Students.

Of note:

- tuition fees are approved by the UBC Board of Governors and usually considered annually in the Spring. Student fees are authorized by student referendum, the UBC Board of Governors, and other student societies and organizations; and
- zero-credit courses are assessed at 1 credit for fees (see the Okanagan Calendar: <http://www.calendar.ubc.ca/okanagan/index.cfm?tree=14,339,1031,0>).

The following four scenarios provide estimates of the total cost to students registered a zero-credit course.

Scenario 1:

Visiting Domestic Undergraduate (for VURS 499 (0) assessed fees at 1 credit)

Tuition		\$150.60
Student Fees with <i>no</i> opt-out provisions	Includes Athletics and Recreation, Students' Union, Canadian Federation of Students, Media Fund (per year); U-pass (per term)	\$65.43
Student fees with <i>opt-out</i>	Opted <i>out</i> of Dental Plan, Extended Health Plan, and iMED (per term)	\$0

provisions	Opted <i>in</i> for Dental Plan, Extended Health Plan, and iMED (per term)	\$289.72
TOTAL:		\$216.03 or \$505.75

Scenario 2:**Visiting International Undergraduate (for VURS 499 (0) assessed fees at 1 credit)**

Tuition		\$703.93
Student Fees with <i>no</i> opt-out provisions	Includes Athletics and Recreation, Students' Union, Canadian Federation of Students, Media Fund (per year); U-pass (per term)	\$65.43
Student fees with <i>opt-out</i> provisions	Opted <i>out</i> of Dental Plan, Extended Health Plan, and iMED (per term)	\$0
	Opted <i>in</i> for Dental Plan, Extended Health Plan, and iMED (per term)	\$289.72
TOTAL:		\$769.36 or \$1,059.08

Scenario 3:**Visiting Domestic Graduate (for VGRS 599 (0) assessed fees at 1 credit)***

Tuition		\$354.75
Student Fees with <i>no</i> opt-out provisions	Includes Athletics and Recreation, Students' Union, Canadian Federation of Students, Media Fund (per year); U-pass (per term)	\$185.52
Student fees with <i>opt-out</i> provisions	Opted <i>out</i> of Dental Plan, Extended Health Plan, and iMED (per term)	\$0
	Opted <i>in</i> for Dental Plan, Extended Health Plan, and iMED (per term)	\$289.72
TOTAL:		\$540.27 or \$829.99

Scenario 4:**Visiting International Graduate (for VGRS 599 (0) assessed fees at 1 credit)***

Tuition		\$703.93
Student Fees with <i>no</i> opt-out provisions	Includes Athletics and Recreation, Students' Union, Canadian Federation of Students, Media Fund (per year); U-pass (per term)	\$185.52
Student fees with <i>opt-out</i> provisions	Opted <i>out</i> of Dental Plan, Extended Health Plan, and iMED (per term)	\$0
	Opted <i>in</i> for Dental Plan, Extended Health Plan, and iMED (per term)	\$289.72
TOTAL:		\$889.45 or \$1,179.17

*The Western Canadian Deans' Agreement (see www.grad.usask.ca/wcdgs/agreement.htm) provides an automatic tuition waiver for visiting graduate students. At UBC, student fees are also waived.

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

External Group

May 7	Brian Lee Crowley, Managing Director, Macdonald-Laurier Institute
May 7	Brent Cameron, Partner, Odgers Berndtson
May 7	Pari Johnston, Director of International Relations, Association of Universities and Colleges of Canada
May 7	Phil Switzer, Managing Partner, Greig Associates
May 7	G-13 Executive Heads Meeting
May 7	Chris Kelly, Former Superintendent, Vancouver School Board
May 7	Preparatory Meeting for the United Way of the Lower Mainland Campaign Cabinet Meeting
May 7	Bob Elton, Former CEO, BC Hydro
May 10	World University Service of Canada Executive Session
May 10	Robin Ciceri, President, Research Universities' Council of BC
May 13	Business Council of British Columbia Membership Committee Meeting
May 14	Great Northern Way Campus (GNWC) Presidents and GNWC Board Chair Meeting
May 14	Andrew Petter, Incoming President, Simon Fraser University
May 14	George Iwama, President, University of Northern British Columbia
May 14	Maureen O'Neil, President and CEO, The Canadian Health Services Research Foundation
May 14	Hassan Khosrowshahi, Chairman, Wesbild Holdings Ltd., Nezhat Khosrowshahi, Lyall Knott, Senior Partner, Clark Wilson LLP, and Susan Knott,
May 17	Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
May 17	David McLean, Chairman, Canadian National Railway Company, Chairman and CEO, McLean Group of Companies

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

May 17	Asa Johal, Founder and President, Terminal Forest Products Ltd.
May 18	Chris Eaton, Executive Director, World University Service of Canada
May 18	120 th Meeting of the Board of Directors, The Conference Board of Canada
May 19	Robert H. Lee, Founder and Chairman, Prospero International Realty Inc.
May 20	G-13 Strategy Meeting prior to the meeting with Stephen Harper, Prime Minister, and Gary Goodyear, Minister, Ministry of State for Science and Technology, Government of Canada
May 28	Marcia Sauder, UBC Donor
May 31	Philip Lee, CEO, Sun Hing Group, and Mabel Lee
June 1	Praveen Varshney, Partner, Varshney Capital Corporation
June 1	Jacqueline Koerner, Member, Steering Committee, UBC Campaign
June 1	Milton Wong, Chairman, Board of Directors, Perceptronix Medical Inc.
June 1	David Turpin, President, University of Victoria
June 2	Mitchell Gropper, Barrister and Solicitor, Farris, Vaughan, Wills & Murphy LLP
June 2	Alison Lawton, Executive Director, Mindset Media Society
June 2	Preparatory Meeting for the United Way of the Lower Mainland Campaign Cabinet Meeting
June 3	World University Service of Canada Executive Committee Meeting
June 4	Dave Cob, CEO, Bev Van Ruyven, Executive VP & Deputy CEO, Lisa Coltart, Executive Director, Customer Care & Power Smart, BC Hydro
June 7	Robin Ciceri, President, Research Universities' Council of BC
June 8	Michael Baar, Assessment Program Director, and Marie Bédard, Assessment Director, Canadian Council on Animal Care
June 10	Klaus Reichwald, Chairman and CEO, Western Group of Companies, and Lydia Reichwald

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

June 10	Charles Fipke, Founder, CF Mineral Research
June 10	Gordon William Steele, Member, Board of Directors, Partnerships British Columbia, and Former President, CEO & Chair, Riverside Forest Products
June 14	Research Universities' Council of BC Planning Session
June 15	Robert H. Lee, Founder and Chairman, Prospero International Realty Inc.
June 15	Marie Earl, Former AVP Alumni & Former Executive Director, UBC Alumni Association
June 16	Association of Universities and Colleges of Canada Board of Directors Meeting
June 16	Deborah Jeffrey, Associate, Mandell Pinder, and Acting Executive Director, First Nations Education Steering Committee
June 17	United Way of the Lower Mainland Campaign Cabinet Meeting
June 17	Robert H. Lee, Founder and Chairman, Prospero International Realty Inc., and Rob King, President, King Pacific Capital Corporation
June 18	David Mitchell, President and CEO, Public Policy Forum
June 18	Peter Wall, Founder, Wall Financial Corporation
June 19	Chris Eaton, Executive Director, World University Service of Canada
June 19	World University Service of Canada Board of Directors Meeting
June 21	Duncan Reid, Executive Director, Goldman Sachs International
June 21	Bret Clayton, Group Executive Business Support and Operations, and Hugo Bague, Group Executive, People & Organization, Rio Tinto plc
June 21	Colin Russel, Founder and Managing Director, Emerging Markets Advisory Services Ltd.
June 21	Pierre-Gerlier Forest, President, Pierre Elliot Trudeau Foundation
June 22	Alison Richard, Vice-Chancellor, and Jonathan Nicholls, Registry, University of Cambridge

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

June 23	Joan Wasyluk, Director, Marketing and Communication, GlobeOp Financial Services
June 23	Malcolm Grant, President and Provost, University College London
June 23	Eva Halper, VP Corporate Citizenship, Credit Suisse, London
June 23	Bruce Hilland, Co-Head, Equity Capital Markets, Liquidnet Europe Ltd.
June 23	Simon Pratt, Project Manager, Global Institutional Profiles Project, Thomson Reuters
June 25	C.V. Chen, Chairman and Managing Partner, Lee & Li Attorneys-at-Law
June 25	Jieh Jow (JJ) Liou, UBC Donor
June 26	Jieh Jow (JJ) Liou, UBC Donor
June 26	Michael Craddock, President, Impark Asia, and Joan Wang, Michael Craddock's Spouse
June 28	Chao-Han Liu, Vice President, Academia Sinica
June 28	John Hardyment, Chairman, Bayshore Pacific Group
July 7	Edward B. Greenspon, Chair and Project Co-Director, GPS Project Canadian International Council and Former Editor-in-Chief, The Globe and Mail
July 9	Arvind Gupta, CEO and Scientific Director, Mathematics of Information Technology and Complex Systems (MITACS)
July 9	Preparatory Meeting for the United Way of the Lower Mainland Campaign Cabinet Meeting
July 12	Henry Lee, President, Tom Lee Music Company Limited
July 12	Gerry Wang, CEO, Seaspan Corporation
July 12	Robert Serraglio, Senior Vice-President, B.C. and the Yukon Division, Diana Reid, VP & Managing Director, BC Region BMO Harris Private Bank, Nada Ristich, Sr. Manager, Corporate Donations (Toronto), BMO Financial Group

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

July 12	Yuen Pau Woo, President and CEO, Asia Pacific Foundation of Canada
July 12	Virginia Greene, President and CEO, Business Council of British Columbia
July 14	Michael Phelps, Chairman and Founder, Dornoch Capital
July 14	Yuen Pau Woo, President and CEO, Asia Pacific Foundation of Canada
July 14	Jacqueline Koerner, UBC Donor
July 14	Robert Rennie, Director, Rennie Marketing Systems
July 14	Robin Ciceri, President, Research Universities' Council of BC
July 15	United Way of the Lower Mainland Campaign Cabinet Meeting
July 15	United Way of the Lower Mainland Diversity Task Group Meeting
July 15	Mr. Peter Robinson, CEO, The David Suzuki Foundation
July 15	Michael Ingham, Bishop, Diocese of New Westminster, Anglican Church of Canada
July 15	Christine Tausig-Ford, Corporate Secretary, Association of Universities and Colleges of Canada
July 16	Mel Cappe O.C., President, Institute for Research on Public Policy

Government

May 6	Ross Hornby, Canadian Ambassador to the European Union
May 6	Patricia Reilly, Member, Cabinet of Commissioner Geoghegan-Quinn, European Commission
May 12	Brainstorming Session on Innovation and Commercialization of Technology hosted by Iain Black, Minister of Small Business, Technology and Economic Development, Province of British Columbia
May 12	Francisco J. Barrio Terrazas, Ambassador of Mexico to Canada and Ángel Villalobos, Consul General of Mexico in Vancouver

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

May 13	Eliot Philipson, President and CEO, Canada Foundation for Innovation
May 14	John Dyble, Deputy Minister, BC Ministry of Health Services, Province of British Columbia
May 20	G-13 Meeting with Stephen Harper, Prime Minister, and Gary Goodyear, Minister, Ministry of State for Science and Technology, Government of Canada
May 31	Ross Hornby, Canadian Ambassador to the European Union
June 25	H.E. Vincent Siew, Vice President, Government of Republic of China (Taiwan) and Jiew Jow (JJ) Liou, UBC Donor
June 25	H.E. Chan Lien, Honourary Chairman of the Kuomintang, Government of Republic of China (Taiwan) and Jieh Jow (JJ) Liou, UBC Donor
June 28	Lou-Chuang Lee, Minister responsible for the National Science Council, Government of Republic of China (Taiwan)
June 28	Scott Fraser, Executive Director, Canadian Trade Office in Taipei
July 8	Gary Goodyear, Minister, Ministry of State for Science and Technology, Government of Canada, and Member of Parliament for Cambridge, Ontario and Stockwell Day, Minister, Ministry of Asia-Pacific Gateway, President, Treasury Board, Government of Canada, and Member of Parliament for Okanagan – Coquihalla
July 13	Mark Zacharias, Assistant Deputy Minister, Ministry of Advanced Education and Labour Market Development, Province of British Columbia
July 15	Graham Whitmarsh, Deputy Finance Minister, Ministry of Finance, Philip Steenkamp, Deputy Minister, Ministry of Advanced Education and Labour Market Development, Province of British Columbia and Robin Ciceri, President, Research Universities' Council of BC
July 15	John Yap, Minister of State for Climate Action, Ministry of Environment, Province of British Columbia
July 15	Moira Stilwell, Minister, Ministry of Advanced Education and Labour Market Development, Philip Steenkamp, Deputy Minister, Ministry of Advanced Education and Labour Market Development, Province of British Columbia and Robin Ciceri, President, Research Universities' Council of BC

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

July 16	Moira Stilwell, Minister, Ministry of Advanced Education and Labour Market Development, Province of British Columbia
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Travel

May 4 – May 6	Brussels, Belgium – Université Libre de Bruxelles (ULB) "Privileged Partner" Meeting and EU Meetings
May 14	Victoria, BC – Meetings
May 19 – May 20	Ottawa, ON – G-13 Meeting with Stephen Harper, Prime Minister, and Gary Goodyear, Minister, Ministry of State for Science and Technology, Government of Canada
June 8 – June 11	Kelowna, BC – President's Researchers Luncheon, Board Meetings, Development Meetings, and UBC Okanagan Spring Congregation
June 21 – June 23	London and Cambridge, UK – Development Meetings, International Meetings and Lecture at University of Cambridge
June 24 – June 29	Taipei, Taiwan – Development and International Meetings
June 30 – July 2	Auckland, New Zealand – Association of Pacific Rim Universities 14th Annual Presidents Meeting

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

Speeches / Events

May 11	UBC and City of Vancouver MOU Announcement re. Green City Action Team Scholars Program
May 11	Farewell Reception for Marie Earl, AVP Alumni & Former Executive Director, UBC Alumni Association
May 13	Official Opening of the Beaty Biodiversity Centre (<i>Gordon Campbell, Premier, Province of British Columbia, attended and spoke at this event.</i>)
May 13	25 Year Club Dinner
May 18	International Symposium on Forestry Education
May 18	Prof. Stephen Toope's Presentation re. the World University Service of Canada's Mission to Sri Lanka
May 18	Development Dinner at Norman MacKenzie House to Honour UBC's Olympic Ambassadors
May 20 – May 22	G8 University Summit 2010 co-hosted by UBC and University of Alberta
May 25	"Let's Get Engaged" Stewardship Event for Dr. Ike Barber and an Update of the Irving K Barber Learning Centre/Small Business Accelerator Launch
May 25	Film Premiere of "Finding Our Way: A Path to Healing Native/non-Native Relations in Canada"
May 26 – June 2	Spring Congregation – UBC Vancouver Campus
May 27	Honourary Degree Reception at Norman MacKenzie House
June 1	Honourary Degree Reception at Norman MacKenzie House
June 3	Dinner in Honour of Michael and Jan Stevenson at Norman MacKenzie House
June 4	Breakfast with the President – Faculty
June 4	UBC Faculty Association Retirees Luncheon

Record of President's Activities

Period of: 1 May 2010 to 16 July 2010

June 8	President's Researchers Luncheon at UBC Okanagan
June 9	UBC Okanagan Endowment Announcement
June 10	UBC Okanagan Honourary Degree Dinner
June 11	UBC Okanagan Spring Congregation
June 15	Faculty of Law Building Campaign Recognition Event
June 16	United Way Leadership Reception
June 17	Reception to Recognize the 2010 Killam Teaching Prize & Graduate Teaching Awards
June 17	Reception for Bill Levine hosted by David and Darrell Mindell
June 17	Old Auditorium Special Preview Event: Private Reception and Performance of Mozart's "The Magic Flute"
June 17	Simon Fraser University's Convocation Ceremony wherein Dr. Julio Montaner received his honorary degree, Doctor of Science <i>honoris causa</i>
June 22	Legitimacy and Legality in International Law: An Interactional Account, An International Seminar with Prof. Stephen Toope at the Lauterpacht Centre for International Law, University of Cambridge
June 28	Dinner in Honour of Prof. Toope hosted by Mr. Scott Fraser, Executive Director, Canadian Trade Office in Taipei
July 1	Symposium: Association of Pacific Rim Universities Responses to Asia-Pacific Issues (Theme: Global Challenges – Pacific Perspectives)
July 7	Reception in Honour of Dr. Sid Katz, Former Managing Director, Chan Centre
July 8	Natural Sciences and Engineering Research Council of Canada (NSERC) Funding Announcements: Collaborative Health Research Projects (CHRP) and Collaborative Research and Training Experience (CREATE) Programs
July 8	President's Service Award for Excellence Recipients Lunch
July 9	Welcome Message for Managing at UBC Program

<p>Record of President's Activities Period of: 1 May 2010 to 16 July 2010</p>
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July 13	Dinner in Honour of Deans Nancy Gallini and Jack Saddler
July 14	Reception to Welcome Dr. Matthew Farrer, Canada Excellence Research Chair in Neuroscience, to UBC
July 15	Dinner in Honour of Mr. Brad Bennett at Norman MacKenzie House
July 16	Official Groundbreaking for the new Pharmaceutical Sciences and Centre for Drug Research and Development Building (<i>Gordon Campbell, Premier, Province of British Columbia, attended and spoke at this event.</i>)

Student Events/Meetings

May 11	Azim Wazeer, Member of the UBC Board of Governors and Senator, Director, Commerce Undergraduate Society, and Director, Alma Mater Society of UBC
June 7	Regina Nyamekye, Incoming President, UBC Africa Awareness Initiative
June 7	Bijan Ahmadian, President, Alma Mater Society, UBC
July 13	UBC Students' Union Okanagan Executive
July 14	Bijan Ahmadian, President, Alma Mater Society, UBC
July 16	Lunch with the AMS Executive

Media Interviews

May 19	Phil Baty, Deputy Editor, Times Higher Education and Editor, Times Higher Education World University Rankings
May 22	Ajit Jain, Managing Editor, India Abroad
July 12	Sarah Cunnane, Reporter, Times Higher Education

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OKANAGAN SENATE SECRETARIAT
Enrolment Services
Senate and Curriculum Services

University Centre · UNC 322
3333 University Way
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Tel: (250) 807-9619 · Fax: (250) 807-8007
www.senate.ubc.ca

September 22, 2010

To: Okanagan Senate
From: Admissions and Awards Committee
Subject: New Award (approval)

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

Motion: *That Senate accept the new award as listed and forward it to the Board of Governors for approval; and that a letter of thanks be sent to the donor.*

Central Okanagan Retired Teachers Association Bursary in Education: A \$1,000 bursary is offered by the Central Okanagan Retired Teachers Association to a student entering or continuing in the Faculty of Education at The University of British Columbia Okanagan. The bursary is awarded to a student who has graduated from a public secondary school in School District No. 23, Central Okanagan. (First award available for the 2010/11 Winter Session)

For the Committee,
Dr. Sharon McCoubrey
Chair, Admissions and Awards Committee

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September 22, 2010

To: Okanagan Senate

From: Admissions and Awards Committee

Subject: Admissions Proposals (approval)

- i. Application and Document Deadlines**
- ii. ELAS, English Language Proficiency Tests**
- iii. Applicants Following the BC/Yukon High School Curriculum, Admission Requirements**
- iv. Advanced Credit or Placement**
- v. Applicants from a College or University**

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

i. Application and Document Deadlines

Revise the Calendar entry for ‘Application and Document Deadlines’, specifically: 1) clarify application deadlines by type of applicant; 2) remove the table that repeats the same information; and 3) clarify and distinguish between the different types of documents required for admission and refer where/when deadlines (variable) will be communicated after applying.

Motion: That Senate approve the proposed changes to the Calendar entry ‘Application and Document Deadlines’.

ii. ELAS, English Language Proficiency Tests

In the Calendar entry for ‘ELAS, English Language Proficiency Tests’, add the Pearson Test of English (Academic) to the list of proficiency tests approved to satisfy the English language admission standard for undergraduate admissions.

Motion: That Senate approve the proposed changes to the Calendar entry 'English Language Proficiency Tests'.

iii. Applicants Following the BC/Yukon High School Curriculum, Admission Requirements

Modify the Calendar entry for 'Applicants Following the BC/Yukon High School Curriculum, Admission Requirements' to reflect the UBC Okanagan Senate-approved policy to exclude high school grades from admission averages when based on challenging a course (see *Criteria for Including Secondary School Courses in UBC Admission Averages* approved by Senate December 2009).

Motion: That Senate approve the proposed changes to the Calendar entry 'Applicants Following the BC/Yukon High School Curriculum, Admission Requirements'.

iv. Advanced Credit or Placement

Modify the Calendar entry for 'Advanced Credit or Placement' to prevent the granting of UBC credit for enriched secondary school courses completed once already attending UBC Okanagan.

Motion: That Senate approve the proposed changes to the Calendar entry 'Applicants Following the BC/Yukon High School Curriculum, Admission Requirements'.

v. Applicants from a College or University

1) Restructure the Calendar entry for 'Applicants from a College or University', adding a table of sub-contents to simplify access to relevant information; 2) add a new Calendar entry under this section entitled 'Program-Specific Prerequisites' to advise prospective transfers to anticipate program-specific prerequisites.

Motion: That Senate approve the proposed changes to the Calendar entry 'Applicants from a College or University'.

For the Committee,
Dr. Sharon McCoubrey
Chair, Admissions and Awards Committee



UBC Okanagan Admissions Proposal Form Change to Calendar

<p>Approval Date: Effective Session: Effective for 2011 admission to UBC Year for change: To be posted to the Calendar as soon as possible.</p>	<p>Date: June 23, 2010 Contact Person: Michael Bluhm Associate Director, Undergraduate Admissions Tel. 604 822-9489 Michael.bluhm@ubc.ca</p>
<p>Types of Actions:</p> <ul style="list-style-type: none"> • Clarify application deadlines by type of applicant • Remove table that repeats same information • Clarify/distinguish between different types of documents required for admission and refer to where/when deadlines (variable) will be communicated after applying. <p>Rationale: The current “Application and Document Deadlines” page format was carried over from UBC Vancouver where a table was necessary to organize exceptions to common application deadlines. This is not necessary for UBC Okanagan, and only creates redundancy in the text. Should deadlines become varied in the future, the proposed format could support a table of exceptions by program.</p> <p>Readmission to same program application deadlines have not been published in the Calendar for several years, however in practice the deadlines have been different than all other applicant groups. This revision brings readmission application deadlines back in line with all other degree program application deadlines.</p> <p>Documentation required in the admission process has always been grouped under one document deadline of June 30th which, for many applicant groups and for many types of documents, was not possible (i.e.: BC high school final grades). In the future, functional document deadlines can be communicated to students at the point of application and can vary by student type and document type, including Supplemental/Broad Based Admission criteria required by some UBC Okanagan programs.</p> <p>Draft Calendar URL: http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=2,331,0,0</p>	

**Present Calendar Entry:**

[Homepage](#) > [Admissions](#) > Application and Document Deadlines

Application and Document Deadlines

[15031] For other important University dates, see [Dates and Deadlines](#).

[15028] These deadlines are the latest dates on which an application or document will be accepted for admission to the Winter Session, beginning in September. Processing of applications does begin before these dates and, in some cases, programs may be filled by well-qualified students before the document deadlines. If a deadline falls on the weekend, it will be extended to the next working day.

[15029] For the Winter Session, undergraduate applications are generally due February 28 and the deadline to submit all final documentation is June 30, unless otherwise noted.

[15577] For those programs that admit students to the Summer Session, the application deadline is generally January 15, unless otherwise noted. Applicants will be advised of document requirements when they apply.

[15030] The following information applies to both domestic and international students. For Non-Degree Studies (Visitor, Unclassified, Concurrent), the application deadline is June 30; document deadline is July 15. The deadline to submit interim transcripts for post-secondary transfer students is February 28.

Program	Credential	Faculty/School	Application Deadline	Document Deadline
Applied Science (Engineering)	B.A.Sc.	Applied Science	Feb 28	Jun 30
Arts	B.A.	Arts and Sciences	Feb 28	Jun 30
Education	B.Ed.	Education	Feb 28	Jun 5
Fine Arts ¹	B.F.A.	Creative and Critical Studies	Feb 28	Jun 30
Health Studies ²	B.A.H.S.	Health and Social Development	Feb 28	Jun 30
Human Kinetics	B.H.K.	Health and Social Development	Feb 28	Jun 30
Management	B.Mgt.	Management	Feb 28	Jun 30
Nursing	B.S.N.	Nursing	Feb 28	Jun 30
Pre-Pharmacy	N/A	Arts and Sciences	Feb 28	Jun 30
Science	B.Sc.	Arts and Sciences	Feb 28	Jun 30



Social Work³ B.S.W. Social Work Feb 28 Jun 30

¹ ~~A portfolio is required and is due on March 31.~~

² ~~Not accepting applications for first- or second-year admission for 2010/11.~~




³ ~~A supplemental application is required and is due on February 28.~~

Proposed Calendar Entry:

[Homepage](#) > [Admissions](#) > Application and Document Deadlines

Application and Document Deadlines

Subcontents

- [Application Deadlines for Undergraduate Degree Programs](#) 
- [Document Deadlines for Undergraduate Degree Programs](#) 
- [Application and Document Deadlines for Non-Degree Entry](#) 

Application Deadlines for Undergraduate Degree Programs

The following deadlines pertain to new-to-UBC Okanagan applicants, applicants applying to change programs and/or campuses within UBC (Vancouver and Okanagan campuses), and applicants applying for [Readmission](#) to a UBC Okanagan program in which they have previously been enrolled but have discontinued their studies for any reason. If a deadline falls on the weekend, it will be extended to the next working day. For other important University dates see [Dates and Deadlines](#).

Summer Session (beginning in May) application deadline: January 15
Note: not all degree programs accept applications to the Summer Session.

Winter Session (beginning in September) application deadline: February 28

Document Deadlines for Undergraduate Degree Programs

In addition to submitting an application for undergraduate admission, applicants are required to submit documentation in order to satisfy admission requirements.

1. [English Language Admission Standard](#)
All applicants are required to meet the [English Language Admission Standard](#). Applicants are notified by email, and via the [Student Service Centre under Application Status](#), of the documentation that is required and the dates by which it must be submitted in order to be considered in an admission decision.



2. Competitive Academic Requirements

All applicants are required to meet University minimum academic standards as well as competitive academic requirements that differ by program. Applicants are notified by email, and via the [Student Service Centre](#) under Application Status, of the transcripts that are required and the dates by which they must be submitted in order to be considered in an admission decision.

3. Supplemental/Broad Based Admission Criteria

Some UBC Okanagan programs require additional information for consideration in admission decisions. This may include a portfolio, audition, manuscript, essay, list of extra-curricular activities, interview, or other information. Applicants are notified by email, and via the [Student Service Centre](#) under Application Status, of the supplemental/broad based applications and any additional documentation that may be required or optional and the dates by which this information must be submitted in order to be considered in an admission decision.

Deadlines for the submission of supporting documentation vary depending on an applicant's academic history. While these deadlines will be communicated to applicants once they apply, applicants should be prepared to submit documents such as transcripts, test scores, and supplemental applications as early as possible following the submission of an application as admission decisions are generally made in the Spring.

Applicants who are offered admission based on academic work in progress are required to submit final documentation showing successful completion of all admission requirements prior to beginning their studies at UBC.

Application and Document Deadlines for Non-Degree Entry

The following deadlines pertain to Visiting Students, Access Study applicants, Concurrent Study applicants, Unclassified Studies, and all others applying to enroll in UBC Okanagan courses through Non-Degree Studies. The application as well as all required and supporting documentation must be submitted by these dates. For more information see [Non-Degree Studies](#).

Summer Session Terms 1 and 2 (beginning in May) application deadline: March 31

Winter Session Term 1 (beginning in September) application deadline: July 31

Winter Session Term 2 (beginning in January) application deadline: November 30



UBC Okanagan Admission Proposal Form Change to Calendar

<p>Approval Date: Effective Session: Effective for 2011 admission Year for change: To be posted to the calendar upon approval for the purpose of advising prospective undergraduate students</p>	<p>Date: June 15, 2010 Contact Person: Rosalie Vlaar, Senior Policy Analyst, Undergraduate Admissions Phone: 822-4240 Email: rosalie.vlaar@ubc.ca</p>
<p>Type of Action: Add the Pearson Test of English (Academic) to the list of English language proficiency tests approved to satisfy the English language admission standard for undergraduate admission.</p> <p>Rationale: Although UBC already lists a number of tests that can be used to satisfy our English language admission standard, the historical philosophy has been that any test that can provide a meaningful assessment of an individual’s ability to perform in UBC’s English language academic environment should be approved, thereby ensuring that prospective students have many options available to them and that any reasonable and legitimate test is not rejected at the point of application.</p> <p>The Pearson Test of English (PTE) Academic assesses all of the specific English language skills considered important by UBC (reading, writing, listening and speaking). The tasks undertaken by test takers are representative of the types of academic tasks that university students must perform and the test results have a demonstrated high validity and high reliability. The test is anticipated to become widely available over time (it is currently available in major cities around the world) and the security measures are the most rigorous in the field.</p> <p>The Common European Framework (CEF) provides a basis for the recognition of language qualifications and concordance tables for the alignment of tests, including the TOEFL and IELTS (already approved by for use by UBC). For undergraduate admission purposes, the minimum language proficiency standard is at the mid-range of CEF level B2, which is described as indicating that “the examinee can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization. They can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. They can also produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options. Level B2 is the level required to participate independently in higher level language interaction. It is typically the level required to be able to follow academic level instruction and to participate in academic education, including both coursework and student life.” The recommended PTE scores align with this standard.</p>	

Draft Calendar URL:

<http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=2,19,1040,0>

Present Calendar Entry:

[Homepage](#) > [Admissions](#) > [English Language Admission Standard](#) > English Language Proficiency Tests

English Language Proficiency Tests**[15520]**

	Test	Competence Level ¹
CAE	Certificate in Advanced English ²	B
CAEL	Canadian Academic English Language assessment	overall 70
	With the speaking sub-test	60
CEL	UBC Certificate in English Language ³	600
CELP	Canadian English Language Proficiency Index Program ⁴	
	CELPIT-A (Academic Reading and Writing)	4L
	CELL (Listening)	4L
	CELTOP (Speaking)	4L
CPE	Certificate of Proficiency in English ²	C
IELTS	International English Language Testing System (Academic)	6.5, with no part less than 6.0
MELAB	Michigan English Language Assessment Battery	85, with a final score of 3 in the speaking test
	With the MELAB Oral Interview	
OC ESL	Intensive Language Development Program	Level 6 ⁵
TOEFL	Test of English as a Foreign Language	
	Either the paper-based test	55
	With the TWE (Test of Written English)	4.0
	Or the Internet-based test	Overall Score: 90
		Reading: 22
		Listening: 22
		Writing: 21
		Speaking: 21

¹ Unless otherwise stated, the score is the minimum on each part of the examination. Minimum scores must be achieved in a single sitting of the test (i.e., scores across multiple instances of a test may not be used to satisfy minimum component requirements). Tests taken more than two years prior to application for admission will not be considered.

² Administered by the University of Cambridge ESOL Examinations organization.

³ From UBC's English Language Institute. See www.eli.ubc.ca/iep for further details.

⁴ From Paragon Testing Enterprises. See www.paragontesting.ca for further details.

⁵ Level 6 requires completion of Okanagan College ESLE 060, ESLR 062, and ESLW 061. UBC requires a grade of 70% or higher in each course to satisfy the English Language Admission Standard.

Proposed Calendar Entry:

[Homepage](#) > [Admissions](#) > [English Language Admission Standard](#) > English Language Proficiency Tests

English Language Proficiency Tests**[15520]**

	Test	Competence Level ¹
CAE	Certificate in Advanced English ²	B
CAEL	Canadian Academic English Language assessment With the speaking sub-test	overall 70 60
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	CELPIT-A (Academic Reading and Writing)	4L
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MELAB	Michigan English Language Assessment Battery	85, with a final score of 3 in the speaking test
	With the MELAB Oral Interview	
OC ESL	Intensive Language Development Program	Level 6 ⁵
PTE	<u>Pearson Test of English (Academic)</u>	<u>Overall Score: 65</u> <u>Reading: 60</u> <u>Listening: 60</u> <u>Writing: 60</u> <u>Speaking: 60</u>
TOEFL	Test of English as a Foreign Language	
	Either the paper-based test	55
	With the TWE (Test of Written English)	4.0
	Or the Internet-based test	Overall Score: 90
		Reading: 22
		Listening: 22
		Writing: 21
		Speaking: 21

¹ Unless otherwise stated, the score is the minimum on each part of the examination. Minimum scores must be achieved in a single sitting of the test (i.e., scores across multiple instances of a test may not be used to satisfy minimum component requirements). Tests taken more than two years prior to application for admission will not be considered.

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UBC Okanagan Admission Proposal Form Change to Calendar

<p>Effective Session: 2011 Admission Year for Change: To be posted to the Calendar upon approval for the purpose of advising prospective students.</p>	<p>Date: June 15, 2010 Contact Person: Rosalie Vlaar, Senior Policy Analyst Enrolment Services 604 822-4240 rosalie.vlaar@ubc.ca</p>								
<p>Type of Action: Reflect in the Calendar the UBCO Senate-approved policy to exclude high school grades from admission averages when based on challenging the course.</p> <p>Rationale: In previously approving the “Criteria for Including a Secondary School Course in a UBC Admission Average”, the Okanagan Senate approved the exclusion of grades received as a result of challenging a course. The proposed Calendar text reflects this change for the purpose of advising prospective undergraduate students from the BC high school system. The language also addresses a process for applicants who challenge a required course that normally must be included in an admission average.</p> <p>Draft Calendar URL: http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=2,22,63,0</p>									
<p>Proposed Calendar Entry:</p> <p>Homepage > Admissions > Applicants Following the BC/Yukon High School Curriculum > Admission Requirements</p> <p>Admission Requirements</p> <p>[93] The minimum academic qualification for admission is secondary school graduation, including the following Grade 12 courses:</p> <p>[94]</p> <table border="1"> <thead> <tr> <th>Grade</th> <th>Required Courses^{1,2}</th> </tr> </thead> <tbody> <tr> <td>Grade 12</td> <td>English 12 or English 12</td> </tr> </tbody> </table>	Grade	Required Courses ^{1,2}	Grade 12	English 12 or English 12	<p>Present Calendar Entry:</p> <p>Homepage > Admissions > Applicants Following the BC/Yukon High School Curriculum > Admission Requirements</p> <p>Admission Requirements</p> <p>[93] The minimum academic qualification for admission is secondary school graduation, including the following Grade 12 courses:</p> <p>[94]</p> <table border="1"> <thead> <tr> <th>Grade</th> <th>Required Courses^{1,2}</th> </tr> </thead> <tbody> <tr> <td>Grade 12</td> <td>English 12 or English 12</td> </tr> </tbody> </table>	Grade	Required Courses ^{1,2}	Grade 12	English 12 or English 12
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<p style="text-align: center;">First Peoples</p> <p style="text-align: center;">Three additional approved examinable Grade 12 courses¹</p> <p>¹ Or approved equivalent International Baccalaureate, Advanced Placement, or post-secondary courses. See Specific Program Requirements for Applicants Following the BC/Yukon Secondary School Curriculum; Advanced Placement and International Baccalaureate Courses Approved to Satisfy Prerequisites; and Post-Secondary Courses that Count Toward BC or Yukon High School Graduation.</p> <p>² See Specific Program Requirements for Applicants Following the BC/Yukon Secondary School Curriculum for programs requiring courses at the Grade 11 level.</p> <p>[95] The admission average will be calculated on English 12 or English 12 First Peoples and the three additional approved Grade 12 courses from the table below, or the equivalents.</p> <p><u>As a general rule, grades received as a result of challenging a course may not be used in the calculation of an admission average. However, students may use challenged courses to satisfy program prerequisites such as the requirement for an approved Language 11 and/or the language degree requirement in the Faculty of Arts and Sciences.</u></p> <p><u>If there are circumstances where an applicant must present a challenge-based mark for a required grade 12 Mathematics, Science, or English course, or where a strong academic student wishes to challenge a UBC-required Grade 12 course in order to take a more advanced course load in high school, please contact Admissions for consideration on a case-by-case basis.</u></p> <p>[96] A minimum average of 67% is required for admission to all programs. However, due to limited enrolment, a</p>	<p style="text-align: center;">First Peoples</p> <p style="text-align: center;">Three additional approved examinable Grade 12 courses¹</p> <p>¹ Or approved equivalent International Baccalaureate, Advanced Placement, or post-secondary courses. See Specific Program Requirements for Applicants Following the BC/Yukon Secondary School Curriculum; Advanced Placement and International Baccalaureate Courses Approved to Satisfy Prerequisites; and Post-Secondary Courses that Count Toward BC or Yukon High School Graduation.</p> <p>² See Specific Program Requirements for Applicants Following the BC/Yukon Secondary School Curriculum for programs requiring courses at the Grade 11 level.</p> <p>[95] The admission average will be calculated on English 12 or English 12 First Peoples and the three additional approved Grade 12 courses from the table below, or the equivalents.</p> <p>[96] A minimum average of 67% is required for admission to all programs. However, due to limited enrolment, a</p>
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higher average is required in most programs.

[97] Applicants who - because of administrative difficulties in their school or because they have a physical, sensory, or specific learning disability - cannot present the courses as required may be excused from a specific admissions course requirement. Supporting documentation is required and must be sent to Admissions by the principal or counsellor of the school concerned.

[...]

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[97] Applicants who - because of administrative difficulties in their school or because they have a physical, sensory, or specific learning disability - cannot present the courses as required may be excused from a specific admissions course requirement. Supporting documentation is required and must be sent to Admissions by the principal or counsellor of the school concerned.

[...]



UBC Okanagan Admission Proposal Form Change to Calendar

<p>Unit: Undergraduate Admissions Effective Session: 2010 Year for Change: 2010</p>	<p>Date: June 15, 2010 Contact Person: Rosalie Vlaar, Sr. Policy Analyst, Undergraduate Admissions Phone: 604-822-4240 Email: rosalie.vlaar@ubc.ca</p>
<p>Type of Action: Prevent granting of UBC credit for enriched secondary school courses completed once already attending UBC Okanagan.</p> <p>Rationale: This is a general policy statement regarding credit for enriched secondary school courses completed after a student has begun attending UBC Okanagan. It applies to Advanced Placement, International Baccalaureate, British A-levels, and any other secondary curricula that are eligible for credit or advanced standing at the point of admission to the University. The goal is to prevent students from either enrolling in or writing exams for such courses concurrent with their UBC study for the purpose of credit toward a UBC degree.</p>	
<p>Proposed Calendar Entry:</p> <p><u>Homepage</u> > <u>Admissions</u> > Advanced Credit or Placement</p> <p><i>Advanced Credit or Placement</i></p> <p>[57] Advanced placement, and in many cases advanced credit, may be given in appropriate secondary school subjects where high academic achievement has been attained <u>as long as the required course work and exams are completed prior to attendance in a degree program at UBC.</u> This provision applies particularly to the Advanced Placement, International Baccalaureate, and General Certificate of Education (Advanced Level) programs. Applicants should refer to the Undergraduate Viewbook or Admissions for more information.</p>	<p>Draft Calendar URL: http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=2,17,0,0</p> <p>Present Calendar Entry:</p> <p><u>Homepage</u> > <u>Admissions</u> > Advanced Credit or Placement</p> <p><i>Advanced Credit or Placement</i></p> <p>[57] Advanced placement, and in many cases advanced credit, may be given in appropriate secondary school subjects where high academic achievement has been attained. This provision applies particularly to the Advanced Placement, International Baccalaureate, and General Certificate of Education (Advanced Level) programs. Interested students should refer to the Undergraduate Viewbook or Admissions for more information.</p>



UBC Okanagan Undergraduate Admissions Proposal Form

<p>Effective Session: 2011 Admission Year for Change: To be posted to the calendar upon approval for the purpose of advising prospective students.</p>	<p>Date: June 23, 2010 Contact Person: Rosalie Vlaar Senior Policy Analyst Undergraduate Admissions Tel. 604-822-4240 rosalie.vlaar@ubc.ca</p>
<p>Type of Actions:</p> <ol style="list-style-type: none"> 1. Restructure the Calendar entry for applicants from a college or university, adding a table of sub-contents to simplify access to relevant information 2. Advise prospective transfers to anticipate program-specific pre-requisites <p>Rationale:</p> <ol style="list-style-type: none"> 1. Restructuring - The content in the column on the right would all be retained but would be linked to via the proposed sub-contents page residing in the current “home” URL for this grouping, listed to the right. The text would then be separated by section, with a new URL for each that contains the existing text under the corresponding sub-headings. 2. Program-specific pre-requisites - The UBC Okanagan Calendar does little to advise prospective transfer students that specific courses may be required for admission at either the secondary or post-secondary level. Appeals of refusal decisions may result from this lack of information. The proposed calendar entry provides notice to transfer applicants that particular courses that are required of high school applicants will also be required of transfer applicants, if they have not taken an equivalent or higher level course that meets the requirement as part of their post-secondary study. It is recommended that all programs specify, in their own admission section of the Calendar, any secondary or post-secondary course pre-requisites required of post-secondary transfers. While this information is currently available for most programs it is not always transparent and in some cases is completely absent from the Calendar. <p>Draft Calendar URL: http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=2,25,0,0</p>	



Proposed Calendar Entry:

[Homepage](#) > [Admissions](#) > [Applicants from a College or University](#)

Applicants from a College or University

Subcontents

- Introduction** >
- Recognized Degree Programs in Canada** >
- Recognized Degree Programs outside of Canada** >
- General Admission Requirement** >
- Program-Specific Prerequisites** >
- Maximum Allowable Transfer Credit** >
- Unassigned Credit** >
- Associate Degrees** >
- Credit Earned via Prior Learning Assessment or Challenge** >
- Institutes of Technology** >
- Appealing for Additional Credit** >

Present Calendar Entry:

[Homepage](#) > [Admissions](#) > [Applicants from a College or University](#)

Applicants from a College or University

[14195] Introduction

[137] Applicants with prior credit from a recognized degree program will be admitted on satisfaction of the appropriate admission requirement as outlined below. Courses successfully completed in prior study, where appropriate, may satisfy requirements of the program of study to which an applicant is admitted.

[138] Applicants with unsatisfactory standing at a college or another university will not be admitted.

[14704] Recognized Degree Programs in Canada



[14705] In British Columbia, recognized degree programs are those authorized by the Ministry of Advanced Education by recommendation of the Degree Quality Assessment Board.

[14706] Recognized degree programs offered in other Canadian provinces include, but are not limited to, those offered by institutions with membership in the Association of Universities and Colleges of Canada (AUCC). Degree programs from other Canadian provinces not offered by AUCC member institutions will be reviewed on a case-by-case basis.

[14707] Recognized Degree Programs from Outside of Canada

[14708] In the United States, recognized degree programs include, but are not limited to, those offered by institutions with regional accreditation from one of the following accrediting bodies: Middle States Association of Colleges and Schools, New England Association of Schools and Colleges, North Central Association of Colleges and Schools, Northwest Commission on Colleges and Universities, Southern Association of Colleges and Schools, Western Association of Schools and Colleges, National Association of Independent Schools. Degree programs from the US not offered by a regionally accredited institution will be reviewed on a case-by-case basis.

[14709] Degree programs offered in other countries may be recognized if they are offered by institutions authorized to do so by the national government or a government-approved accrediting body, and will be considered on a case-by-case



basis.

[14196] General Admission Requirement

[139] The minimum academic standing to qualify for admission to the University as a transfer student is successful completion of 24 transferable credits with a C average (60% where 50% is a passing grade), or grade point average of 2.0 (calculated on a 4.0-point scale¹). Applicants presenting fewer than 24 credits are evaluated on the basis of both final secondary school grades and the partial post-secondary studies completed.

[13927] For applicants presenting more than 24 transferable credits, the admission average is based on the average of the most recently completed 30 credits of college or university courses attempted, including failures and repeated courses, unless otherwise prescribed by the program to which admission is sought.

[140] Because of enrolment limitations, most programs require a higher average for admission than the University minimum, and may require a minimum standing in specified courses. Applicants should consult the relevant faculty or school entry requirements for a statement of admission requirements for the program to which they seek admission. To be eligible for second year, applicants must normally have successfully completed 30 credits, and satisfied all promotion requirements for advancement to that year. Applicants to third year must have successfully completed 54-60 credits, and satisfied all promotion requirements for advancement to that year.

[14569] ¹A+ = 4.33, A = 4.0, A- = 3.67, B+ = 3.33, B = 3.0, B- = 2.67, C+ = 2.33, C = 2.0, C- = 1.67, D+ = 1.33, D = 1.0, D- = 0.67, F = 0.0.



Program-Specific Prerequisites

Many undergraduate programs require post-secondary transfer applicants to satisfy specific academic requirements at either the secondary or post-secondary level in order to be considered for admission.

Transfer applicants should consult the Calendar for more information on program and course prerequisites for the program(s) to which they wish to apply.

In some cases, university transferable course work may satisfy high school prerequisites. Information on acceptable post-secondary equivalents may be obtained from an academic advisor in the faculty.

[14197] Maximum Allowable Transfer Credit

[141] In general, transfer credit is limited to the first two years of an undergraduate degree program, but credit at a more senior level is possible with the approval of the faculty concerned. No more than 60 credits of transfer credit, or 50% of required program credits, are allowed in any program, and in some programs the maximum may be less. Courses successfully completed at recognized colleges in BC and Yukon are granted transfer credit in accordance with agreed-upon equivalencies published in the [BC Transfer Guide](#). Courses completed at recognized universities and university colleges in BC are likewise granted credit on the basis of established equivalencies. Courses successfully completed at colleges and universities outside BC and Yukon will be assessed for transfer credit on a course-by-course basis. Students applying for



transfer credit may be required to supply a copy of the current calendar of the college or university at which they have previously studied in order that an assessment can be made.

[14198] Unassigned Credit

[143] Unassigned credit may be granted where a course-to-course equivalence cannot be established. This credit may be used as elective credit. Elective credit may be either in a particular discipline (e.g., Economics (3) credits) or in a faculty (e.g., Arts (6) credits). **Note:** there may be specific faculty or school requirements, as well as specific program requirements, that unassigned credit may not satisfy.

[14199] Associate Degrees

[144] Students with Associate Degrees of Arts or Science from a recognized college or university college in BC or the Yukon, if admitted to the Faculty of Arts and Sciences, are guaranteed full transfer credit (60 credits) for the work done for their Associate Degree. Students must still meet all 100- and 200-level course requirements for specific degree programs (e.g., majors, honours, faculty-level requirements) and this may require students to take more than 120 total credits to earn their degree. Students admitted with Associate Degrees must meet the competitive admission average for the program to which they apply if this average is above the published minimum.

[14200] Credit Earned via Prior Learning Assessment or Challenge

[145] Credits earned via prior learning assessment (PLA), challenge credit, or the equivalent, at another recognized post-



	<p>secondary institution are acceptable at UBC, provided that the course to which those credits apply is recognized by the University as suitable for transfer credit. The University accepts only PLA credits that are assigned to specific courses.</p> <p>[14201] Institutes of Technology</p> <p>[146] Advanced Standing or transfer credit for up to one full year of degree study may be granted, where appropriate.</p> <p>[14202] Appealing for Additional Credit</p> <p>[147] Students who feel an error has been made in the credit granted at time of admission should first make a written request to Enrolment Services for a review of credit granted on admission. If they are not satisfied with the review decision, students should then consult the faculty or school to which they are seeking admission.</p>
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THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN



OKANAGAN SENATE SECRETARIAT
Enrolment Services
Senate and Curriculum Services

University Centre · UNC 322
3333 University Way
Kelowna, BC · V1V 1V7
Tel: (250) 807-9619 · Fax: (250) 807-8007
www.senate.ubc.ca

September 22, 2010

To: Okanagan Senate

From: Admissions and Awards Committee

**Subject: Practice on Admissions Decisions Involving Dean's Discretion
(information)**

The enclosed *Practice on Admissions Decisions Involving Dean's Discretion* was presented to the Admissions and Awards Committee for approval in July 2010 under its Senate-delegated authority to decide on appeals of admission/readmission. After some discussion the Committee resolved to circulate the procedures to all Deans (or their designates in the matter of admission appeals) prior to considering it for approval. All faculties responded with unanimous support. On August 30, 2010, the Admissions and Awards Committee approved the procedures and presents them now to the Okanagan Senate for information.

THE UNIVERSITY OF BRITISH COLUMBIA



OKANAGAN

Enrolment Services

3333 University Way
Kelowna, BC Canada V1V 1V7
Tel: (250) 807-9100
Fax: (250) 807-8007

Date: July 19, 2010
To: Okanagan Senate Admissions and Awards Committee
From: Michelle Kruiswyk, Admissions and Enrolment Support Manager
Re: Practice on Admissions Decisions Involving Dean's Discretion (approval)

Attached please find a procedural document that identifies the appropriate route for varying admissions appeals. This table, which was presented to the Committee for information in October of 2008, has been updated to reflect current practice on the Okanagan campus and is now being presented for approval.

In the document, three main applicant groups have been identified (high school, post-secondary transfer, and UBC transfer), and applicable policies have been listed and described for each. For each policy, the document specifies whether dean's discretion can be applied to waive the requirement or whether Committee approval is needed. As a general rule, faculty requirements can be waived by a dean (or dean's designate) while university requirements can only be waived through the Committee.

A similar document was approved by UBC Vancouver's Admissions Committee in August of 2009; the proposed Okanagan document differs slightly from the Vancouver version. Beyond the changes incorporated to make the document applicable to Okanagan policies and practices, the authority to waive the requirement that an applicant be from an accredited institution has been retained by the Committee, not a dean, on this campus.

If approved, this document will be referred to Senate for information and be included in the Committee's Procedures Manual. Review of the document will occur when deemed necessary by the Committee.

Practice on Admission Decisions Involving Dean's Discretion

Approved by the Senate Admissions and Awards Committee on August 30, 2010

Applicant Group	Policy	Description	Dean's Discretion to Waive?	A&A Approval Required?
All High School	Minimum Admission Average of 67%	A minimum admission average of 67% is required for admission to all programs	No	Yes
All High School	High School Graduation	A minimum academic qualification for admission is secondary school graduation	No	Yes
BC High School	4 Academic Subjects	The admission average will be calculated for BC high school applicants on English 12 and the three additional approved Grade 12 courses	No	Yes
All Other High School	Minimum # of Academic Subjects	The admission average will be calculated on the minimum number of required courses for each educational jurisdiction	No	Yes
All High School	English Language Admission Standard (ELAS)	All applicants regardless of country of origin or of citizenship status, will be required to demonstrate English language proficiency via one of the prescribed ELAS mechanisms	No*	Only if appealed beyond Undergraduate Admissions
All High School	Recognized/Accredited Institution	The minimum academic qualification for admission is secondary school graduation from a recognized secondary school	No	Yes
All High School	Program Requirements	Specific program requirements (beyond general admission requirements)	Yes	Only if appealed beyond Faculty
All High School	Competitive Average	Successful candidates must present a competitive admission average and/or combination of average and BBA criteria	Yes	Only if appealed beyond Faculty

* There is a published policy for waiver of ELAS requirements published in the Calendar and administered by Undergraduate Admissions

Practice on Admission Decisions Involving Dean's Discretion

Approved by the Senate Admissions and Awards Committee on August 30, 2010

Applicant Group	Policy	Description	Dean's Discretion to Waive?	A&A Approval Required?
Post-Secondary	Minimum Average of 2.0 or 60%	The minimum academic standing to qualify for admission as a transfer students is successful completion of at least 24 transferable credits with a "C" average (60% where 50% is a passing grade), or a grade point average of 2.0 on a 4-point scale	No	Yes
Post-Secondary	Unsatisfactory Standing	A student with an unsatisfactory standing at a college or another university may be inadmissible	No	Yes
Blended Sec/Psec Admission	High School and Post-Sec Evaluation <24 cr.	Applicants presenting fewer than 24 credits are evaluated on the basis of both final secondary school grades and the partial post-secondary studies completed	Yes	Only if appealed beyond Faculty
Post-Secondary	Accredited/Recognized Institution	The basis of admission as a transfer student must be from study at a UBC-recognized institution (not all institutions are accredited and not all accreditation meets UBC standards for admission and transfer)	No	Yes
Post-Secondary	English Language Admission Standard (ELAS)	All applicants regardless of country of origin or of citizenship status, will be required to demonstrate English language proficiency prior to admission	No*	Only if appealed beyond Undergraduate Admissions
Post-Secondary	Program Requirements	Specific program admission requirements	Yes	Only if appealed beyond Faculty
Post-Secondary	Competitive Average	Competitive admission requirement	Yes	Only if appealed beyond Faculty

* There is a published policy for waiver of ELAS requirements published in the Calendar and administered by Undergraduate Admissions

Applicant Group	Policy	Description	Dean's Discretion to Waive?	A&A Approval Required?
UBC Students Program Transfers	Minimum Average of 2.0 or 60%	Currently attending UBC students who wish to change faculties must meet the University minimum average of 60% or 2.0 grade point average	Yes	Only if appealed beyond Faculty
UBC Students Program Transfers	Competitive Average	Currently attending UBC students who wish to change faculties must meet the competitive admission requirement of the program to which they are applying	Yes	Only if appealed beyond Faculty
UBC Students	Readmission	Students applying for readmission to a faculty in which they were previously enrolled must meet the University minimum average of 60% or 2.0 grade point average	Yes	Only if appealed beyond Faculty

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN



OKANAGAN SENATE SECRETARIAT
Enrolment Services
Senate and Curriculum Services

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3333 University Way
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Tel: (250) 807-9619 · Fax: (250) 807-8007
www.senate.ubc.ca

September 22, 2010

To: Okanagan Senate

From: Admissions and Awards Committee and Curriculum Committee

Subject: Environmental Chemistry Honours Program (approval)

The Admissions and Awards Committee and the Curriculum Committee have reviewed the material presented by the Faculty of Arts and Sciences for the Environmental Chemistry Honours Program. The attached proposal is deemed ready for approval.

As such, the following is recommended to Senate:

Motion: *That Senate approve the Environmental Chemistry Honours Program brought forward by the Faculty of Arts and Sciences as set out in the attached proposal.*

For the Committees,
Dr. Sharon McCoubrey, Chair, Admissions and Awards Committee
Dr. Marvin Krank, Chair, Curriculum Committee



UBC Okanagan Curriculum Proposal Form New or Change to Course or Program

Category: 1

<p>Faculty: Arts and Sciences Department: Chemistry Faculty Approval Date: August 10, 2010 Effective Session: 2010W</p>	<p>Date: March 25, 2010 Contact Person: W. Stephen McNeil Phone: 250.807.8751 Email: s.mcneil@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p><u>Homepage</u> > <u>Faculties, Schools, and Colleges</u> > <u>Faculty of Arts and Sciences</u> > <u>Bachelor of Science Programs</u> > Environmental Chemistry</p> <p>Environmental Chemistry</p> <p>[14619] Major in Environmental Chemistry</p> <p>[14629] Note: UBC Okanagan also offers a <u>Major in Chemistry</u>.</p> <p>[14679] This program provides students with a core education in the four important areas of chemistry: analytical, inorganic, organic, and physical chemistry, with specialization in environmental chemistry. Employment opportunities include positions with environmental consulting firms, environmental departments in industrial operations, analytical laboratories, and environmental regulatory agencies.</p> <p>[14620] Students entering the Major in Environmental Chemistry program must complete Chemistry 11 (or equivalent) and Principles of Mathematics 12 or Pre-Calculus 12. Students are strongly advised</p>	<p>Draft Calendar URL: http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,282,858,1256</p> <p>Present Calendar Entry:</p> <p><u>Homepage</u> > <u>Faculties, Schools, and Colleges</u> > <u>Faculty of Arts and Sciences</u> > <u>Bachelor of Science Programs</u> > Environmental Chemistry</p> <p>Environmental Chemistry</p> <p>[14619] Major in Environmental Chemistry</p> <p>[14629] Note: UBC Okanagan also offers a <u>Major in Chemistry</u>.</p> <p>[14679] This program provides students with a core education in the four important areas of chemistry: analytical, inorganic, organic, and physical chemistry, with specialization in environmental chemistry. Employment opportunities include positions with environmental consulting firms, environmental departments in industrial operations, analytical laboratories, and environmental regulatory agencies.</p> <p>[14620] Students entering the Major in Environmental Chemistry program must complete Chemistry 11 (or equivalent) and Principles of Mathematics 12 or Pre-Calculus 12. Students are strongly advised</p>



to complete Chemistry 12.

First Year	Credits
CHEM 111, 113; or CHEM 121, 123	6
MATH 100, 101	6
Two of ENGL 112, 113, 114, 150, 151, 153	6
PHYS 112, 122; or PHYS 102, 111	6
BIOL 116, 125; or two of EESC 101, 111, 121 ¹	6
Total Credits	30

Second Year	Credits
One of CHEM 201, 210	3
CHEM 203, 204	6
CHEM 211	3
CHEM 220	3
STAT 230	3
BIOL 116, 125; or two of EESC 101, 111, 121 ¹	6
Arts elective ²	3
Science elective ²	3
Total Credits	30

Third and Fourth Years	Credits
CHEM 301, 302	6
CHEM 311	3
CHEM 317	3
One of CHEM 330, 333, 413	3
One of CHEM 335, 337, 338, 339	3
One of CHEM 412, 434	3
CHEM 461	3
EESC 309, 323	6
EESC 423	3
Two approved environmental electives ^{2,3}	6
Arts electives ²	9
Electives ²	12
Total Credits	60

to complete Chemistry 12.

First Year	Credits
CHEM 111, 113; or CHEM 121, 123	6
MATH 100, 101	6
Two of ENGL 112, 113, 114, 150, 151, 153	6
PHYS 112, 122; or PHYS 102, 111	6
BIOL 116, 125; or two of EESC 101, 111, 121 ¹	6
Total Credits	30

Second Year	Credits
One of CHEM 201, 210	3
CHEM 203, 204	6
CHEM 211	3
CHEM 220	3
STAT 230	3
BIOL 116, 125; or two of EESC 101, 111, 121 ¹	6
Arts elective ²	3
Science elective ²	3
Total Credits	30

Third and Fourth Years	Credits
CHEM 301, 302	6
CHEM 311	3
CHEM 317	3
One of CHEM 330, 333, 413	3
One of CHEM 335, 337, 338, 339	3
One of CHEM 412, 434	3
CHEM 461	3
EESC 309, 323	6
EESC 423	3
Two approved environmental electives ^{2,3}	6
Arts electives ²	9
Electives ²	12
Total Credits	60



Minimum credits for degree 120

¹ Students must complete BIOL 116, 125, and two of EESC 101, 111, 121. The order in which these pairs of courses are completed in first and second year is optional.

² At least 18 total credits (including 6 credits in first-year English) must be in Arts courses. A further 9 elective credits must be from either Arts or Science other than Chemistry. At least 9 elective credits must be 300 level or higher, and 3 of these must be Science credits.

³ The environmental electives must be chosen from outside Chemistry, in consultation with a program advisor.

[15525] Students are encouraged to take courses offered in other disciplines that are relevant to the B.Sc. in Environmental Chemistry. Such courses often have prerequisites, so students should start planning their electives early in their degree program.

Environmental Chemistry Honours Program

The Honours in Environmental Chemistry program is designed to provide an intensive program of study through coursework and research experience. 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 Environmental Chemistry program, except 6 credits of the elective component of the program must be in CHEM 449.

Admission Requirements

Minimum credits for degree 120

¹ Students must complete BIOL 116, 125, and two of EESC 101, 111, 121. The order in which these pairs of courses are completed in first and second year is optional.

² At least 18 total credits (including 6 credits in first-year English) must be in Arts courses. A further 9 elective credits must be from either Arts or Science other than Chemistry. At least 9 elective credits must be 300 level or higher, and 3 of these must be Science credits.

³ The environmental electives must be chosen from outside Chemistry, in consultation with a program advisor.

[15525] Students are encouraged to take courses offered in other disciplines that are relevant to the B.Sc. in Environmental Chemistry. Such courses often have prerequisites, so students should start planning their electives early in their degree program.



- Fourth-year standing (minimum of 78) credits in the Environmental Chemistry Major.
- Minimum grade average of 75% in all courses taken to date applicable to the Environmental Chemistry Major.
- Enrolment in CHEM 449.

Graduation Requirements

- Completion of the course requirements for the Major in Environmental Chemistry.
- A minimum 75% graduating grade average (GGA).
- CHEM 449 with a minimum grade of 75%.

Type of Action: On the Environmental Chemistry degree Calendar page, insert parallel wording that describes an Environmental Chemistry Honours program.

Rationale: With the recent changes to the Environmental Chemistry degree program, it should have its own Honours option, distinct from that associated with the Chemistry degree.

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN



OKANAGAN SENATE SECRETARIAT
Enrolment Services
Senate and Curriculum Services

University Centre · UNC 322
3333 University Way
Kelowna, BC · V1V 1V7
Tel: (250) 807-9259 · Fax: (250) 807-8007
www.senate.ubc.ca

September 22, 2010

To: Okanagan Senate
From: Learning and Research
Subject: Candidate for Emerita Status (approval)

Faculty Members Eligible for Emeritus Status: Candidate for Emeritus Status Resigning
UBC Okanagan Faculty

1. Dr. Lalage Grauer, Associate Professor, Faculty of Creative and Critical Studies
(resignation date: June 30, 2010)

The Learning and Research Committee is pleased to recommend the following:

Motion: *That Senate approve the above individual to receive emerita status, with such status to become effective upon her date of resignation from the University;*
and
That her name be added to the Roll of Convocation.

Respectfully submitted,
Mr. Peter Arthur
Chair, Learning and Research Committee

EMERITUS REPORT TO SENATE SEPTEMBER 2010

Title	First Name	Last Name	Gender	Retirement Date	Years of Service	Retirement Age	Rank	Faculty/School	Department	Eff Date	Reason	Birthdate	Term Date
Dr.	Lalage	Grauer	Female	6/30/2010	15	62	Associate Professor (tenure)	Creative and Critical Studies	Critical Studies	7/1/2010	ERT	1/28/1948	6/30/2010

<http://www.senate.ubc.ca/okanagan/policies.cfm?ID=3>

Okanagan Senate

Senate policies

Emeritus Status

The recommendations in the following report were accepted by the Okanagan Senate at its meeting of May 12, 2006 and modified by the Okanagan Senate at its meeting of March 26, 2007.

Emeritus Status

Emeritus status is a recognition conferred upon individuals who have retired from UBC Okanagan but who are permitted to retain as an honorary title the rank held at retirement as set out in the following criteria and with the following titles. In contrast to the practice at some other universities, in which emeritus status may be awarded on a selective basis, UBC Okanagan currently awards this status to all who meet basic (although subject to change) eligibility requirements related to age, rank, and years of service. The title confers certain university privileges and carries an implicit connotation of merit.

Criteria for Emeritus Status

Emeritus status is a recognition conferred upon individuals who have retired from UBC Okanagan but who are permitted to retain an honorary title. It is granted to those who meet the following criteria:

- Have a combined age at retirement plus years of full-time service to the University of 70 or more, and
- Have held a full-time Tenure, Tenure-track, Grant Tenure, or Grant Tenure-track position at the rank of Assistant, Associate, or Full Professor or Senior Instructor for a minimum of five years.

In meeting the above criteria, full account will be taken of previous faculty appointments at Okanagan University College or at UBC Vancouver.

- Those individuals who held emeritus status at Okanagan University College on June 30, 2005 and who held a faculty appointment at OUC for a minimum of three years may apply to accept emeritus status at UBC Okanagan.
- Those individuals who retired from Okanagan University College between December 31, 2003, and June 30, 2005, and who held a faculty appointment in a degree program or librarian appointment at OUC for a minimum of three years may apply to accept emeritus status at UBC Okanagan.

Titles

Emeritus status is granted with the title corresponding to gender and the highest faculty rank an individual held at UBC as follows: Instructor Emeritus/Emerita, Assistant Professor Emeritus/Emerita, Associate Professor Emeritus/Emerita, and Professor Emeritus/Emerita.

For OUC emeriti who are granted UBC Okanagan emeritus status, the title will correspond to the OUC emeritus title to the extent possible, but will be one of the following: Assistant Professor Emeritus, Associate Professor Emeritus or Professor.

Emeritus status is granted to Librarian Emeritus who must have held a Confirmed appointment. A former Deputy Vice Chancellor may express a preference to be granted instead the title Deputy Vice Chancellor Emeritus.

A former Dean who has served a minimum of five years may express a preference to be granted instead the title Dean Emeritus.

[In addition, the following system-wide emeritus appointments are automatically made: a former Chancellor is granted the title Chancellor Emeritus; and a former President is granted the title President Emeritus.]

Privileges

Privileges that may be afforded to emeritus faculty include:

- Free parking on the Okanagan campus
- Free library card
- Office and/or research space availability subject to approval of Dean and in consultation with the Department or School
- Tuition waivers for emeriti under age 65 (any BC resident age 65 or older is eligible for free tuition)
- Tuition waivers for dependent children
- Membership in the Okanagan Association of Professors Emeriti
- [Currently, health benefits are afforded to all retirees after the age of 55]

It is noted that the privileges listed above do not lie within the jurisdiction of Senate, and that they may be modified at any time without referral to Senate.

Procedures

In June and December of each year, the Senate Secretariat obtains from UBC Okanagan Human Resources and forwards to the Learning and Research Committee a list of retiring faculty members who meet the relevant criteria. The Committee considers the list and forwards it to Senate for final approval. The Secretary to Senate notifies faculty members of their emeritus status by letter following the Senate meeting.

With regard to OUC emeriti, upon Senate's approval of this report, the Registrar will develop a list of OUC emeriti and those who retired between January 1, 2004 and June 30, 2005, who should be given the opportunity to accept UBC emeritus status. At the appropriate time, Senate will be requested to approve a corresponding motion in order to confer the title on those individuals who accept emeritus status.

This information is for quick reference. For the full text of the Minutes of Senate, which include the motions and discussion, please see the [Minutes Archive](#).

 [Back to policy abstract list](#)

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN



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www.senate.ubc.ca

September 22, 2010

To: Okanagan Senate

From: Learning and Research Committee

Subject: Establishment of the Institute for Species at Risk and Habitat Studies (SARAHS) (approval)

The Learning and Research Committee is pleased to recommend the following to Senate:

Motion: That the Senate approve the establishment of the Institute for Species at Risk and Habitat Studies (SARAHS) as set out in the attached proposal and forward it to the Board of Governors for approval.

For the Committee
Dr. Peter Arthur
Chair, Learning and Research Committee

THE UNIVERSITY OF BRITISH COLUMBIA




OKANAGAN

Office of the Provost (Okanagan)
3333 University Way
Kelowna, BC Canada V1V 1V7
Tel: 250.807.8536 Fax: 250.807.8537
E-mail: provost.okanagan@ubc.ca

MEMORANDUM

April 20, 2010

TO: UBC Okanagan Senate
Attention: Nathalie Hager Manager, Okanagan Senate Secretariat

FROM: Dr. Alaa Abd-El-Aziz, 
Provost and Vice Principal Academic and Research Okanagan

RE: Establishment of the Institute for Species at Risk and Habitat Studies (SARAHS)

RECOMMENDATION:

I recommend that the UBC Okanagan Senate approve the establishment of the Institute for Species at Risk and Habitat Studies (SARAHS) effective July 1, 2010

RATIONALE:

SARAHS has been operating as a centre for the past four years. In late 2009, the process for converting the centre into an institute was initiated. In consultation with my office, a full proposal for the creation of the institute was prepared, along with an executive summary. The executive summary is attached.

The process that was followed complies with the UBC Okanagan Senate Policy on Research Centres and Institutes.

On April 12, 2010, the full proposal was reviewed by the Senate Research and Learning Committee which voted in favour of recommending the creation of the Institute.

I am in support of the creation of this Institute on the terms set out in the proposal and as summarized in the executive summary.

<http://www.senate.ubc.ca/okanagan/policies.cfm?go=abstracts>

Okanagan Senate

Senate policies

Research Centres

The recommendations in the following report were accepted by the Okanagan Senate at its meeting of February 13, 2008, by the Senate Policies and Procedures Committee.

Characteristics of research centres at UBC Okanagan

A research centre

- Is established or disestablished by a faculty or college dean (or, in the case of multi-faculty centres by the relevant deans serving as a Decanal Steering Committee) in consultation with the Provost and under procedures set by the relevant faculty or faculties.
- Has a project or theme-based mandate that focuses on scholarly or scientific investigation or inquiry; often associated with an internal or external grant.
- Benefits from single or multi-faculty involvement.
- Is led by a director who reports to the host faculty or college dean (or a Decanal Steering Committee for multi-faculty centres) who report(s) in turn to the Provost on matters relating to the centre. A centre is otherwise governed as its host faculty, faculties, or college see fit.
- Adheres to standard university research policies.
- Does **not** offer for-credit programs or courses; centres may offer not-for-credit courses and certificates.

Development, approval, and review of research centres

1. Established through Academic Unit or Department Heads, Deans and/or Directors in consultation with the Provost UBC Okanagan; centres are established within a host faculty, college, or within several host faculties.
2. Upon establishment, a research centre must have a management plan that includes a mandate, sources of funding, and a schedule for review. As a result of such a review, the dean or Decanal Steering Committee may determine that a research centre may continue as a research centre, be considered for transition to a research institute or other type of unit, or be discontinued as appropriate. This management plan and any amendments thereto are to be copied to the Provost of UBC Okanagan.
3. The Provost UBC Okanagan will report for information the establishment of a centre to Senate, but it does not require Senate approval. When a centre is discontinued, the Okanagan Provost will also report that to Senate for information.

Applicability note

The policy is intended to apply to all UBC Okanagan research centres established in the future. Centres that were established prior to the creation of this policy, may wish to consider proposing (and submitting for approval as appropriate) certain adjustments, e.g., to their names, to bring existing units in line with the new policy.

This information is for quick reference. For the full text of the Minutes of Senate, which include the motions and discussion, please see the [Minutes Archive](#).

Okanagan Senate

Senate policies

Research Institutes

The recommendations in the following report were accepted by the Okanagan Senate at its meeting of November 7, 2007, and modified by the Okanagan Senate at its meeting of February 13, 2008, by the Senate Policies and Procedures Committee.

Characteristics of research institutes at UBC Okanagan

A research institute:

- Requires Senate approval to exist.
- Is not normally identified with a single faculty.
- Is intended to be permanent, i.e., intended to exist for more than three years.
- Generally involves external funding as well as the UBC Okanagan base operating budget and is normally allocated a budget.
- Houses paid administrative personnel, including a director.
- Adheres to standard university research policies.
- Is governed through a steering committee which shall include senior administrators as well as faculty and the institute director. There may also be a separate external advisory board.
- Submits annual reports to the Senate on activities. If the institute does not perform to the Senate's expectations three years in succession, Senate may vote to dismantle the institute.
- Does **not** offer undergraduate or graduate programs or degrees; undergraduate and graduate work is the purview of faculties, schools, colleges, and departments.
- May initiate and/or develop undergraduate and graduate courses in partnership with one or more faculties, schools, colleges, or departments. Participating faculty members are appointed to a faculty, rather than to the institute itself.

Development and approval procedure for research institutes

1. Proposal initiated by faculty, Dean, or other university personnel.
2. Preliminary plan submitted to Associate Vice-President, Academic & Research.
3. Associate Vice-President, Academic & Research establishes a committee to develop a full proposal and informs Okanagan Senate Learning & Research Committee.
4. The full proposal, including a business plan, the structure, procedures, plans for a review following a specified period of operation, and an indication that the institute will be fully viable within three to five years, submitted to Senate Learning & Research Committee. The Learning & Research Committee ensures the academic credibility of institutes.
5. Learning & Research Committee reports to Senate with a recommendation.
6. Senate consideration for approval.
7. Senate recommends approval by the Board of Governors.
8. Once approved, the proposal returns to the Associate Vice-President, Academic & Research for implementation oversight.

Applicability note

The policy is intended to apply to all UBC Okanagan research institutes established in future. Institutes that were established prior to the creation of this policy, may wish to consider proposing (and submitting for approval as appropriate) certain adjustments, e.g., to their names, to bring existing units in line with the new policy.

This information is for quick reference. For the full text of the Minutes of Senate, which include the motions and discussion, please see the [Minutes Archive](#).

**A PROPOSAL TO THE UBC OKANAGAN SENATE FOR
ESTABLISHMENT OF:

THE INSTITUTE FOR SPECIES AT RISK AND HABITAT STUDIES
(SARAHS)**

EXECUTIVE SUMMARY

Introduction

This proposal outlines a plan for the SARAHS Centre to become an institute. It includes our strategic plan for the Institute, the rationale, a plan for adding to existing partners, a proposed governance and administrative structure, funding, and future needs. In summary, SARAHS is presently fulfilling the role of an institute as defined by the Okanagan Senate. The future ability of SARAHS to grow and serve its partners within and outside the UBC Community will be significantly enhanced if SARAHS is officially recognized as a UBC institute.

History

The Centre for Species at Risk and Habitat Studies (SARAHS) opened in March 2006 at the University of British Columbia Okanagan. The centre's central goal is to enable interdisciplinary research on the structure and function of habitats and populations of species at risk at local, national and international levels. Areas of research focus include globally pressing topics such as: identifying and managing species and habitats at risk, understanding and predicting biotic responses to changing environments, and sustaining resources and ecosystems services in natural and managed landscapes. The breadth of SARAHS membership results in research activities that combine field, laboratory and theoretical approaches to address complex environmental questions. Strategic integration of resources and geographic proximity to the Okanagan Valley, one of the four most endangered eco-regions in Canada, have uniquely situated SARAHS as an emerging leader in conservation science.

SARAHS Centre existing membership and productivity

Since its conception (2006), SARAHS has grown from 20 to 82 members, and its faculty and students currently come from diverse backgrounds across the Faculties of Arts and Sciences and Creative and Critical Studies. As an Institute, we will plan to expand our mission past the Faculties of Creative and Critical Studies and Arts and Science by collaborating with members of other faculties, including The Faculty of Applied Sciences, The Faculty of Health and Social Development and The Faculty of Management.

The productivity of SARAHS has been remarkable; over 90 publications were published by SARAHS Principal Investigators (PIs) 2008/2009 and over 50 media interviews of PIs were performed in the last 4 years.

SARAHS Centre existing space and resources

Thanks to a successful CFI grant in 2004, SARAHS has a number of laboratory facilities equipped with state-of-the-art instrumentation. On the third floor of the Science building, we have a soils lab, microscope room, physiology laboratory, computer/GIS laboratory, ecology laboratory, freezer room, cold rooms, preparatory room, and radio-isotope room. This space has helped to unify the SARAHS research group, and we have used it to accommodate many new faculty members—both members and non-members of SARAHS—while new facilities are being constructed. Although existing infrastructure will continue to support the SARAHS membership, we are approaching a position of needing more space to support our researchers to their full research potential.

SARAHS Centre existing governance and membership

The Dean of the Irving K. Barber School of Arts and Sciences at UBC Okanagan appoints the Director on the recommendation of the voting membership. The Director is responsible for coordinating the operations of SARAHS, including its administrative staff and budget. The Director shall chair the Steering Committee. Founding members have life membership; other interested faculty or people external to the University apply for 3-year terms as members and current members

vote upon their applications. Students of faculty who are SARAHS members are automatically granted memberships; other students may apply. SARAHS has 82 members based on this membership structure.

SARAHS Centre existing administration and staff

The Director, who is advised by the Steering Committee, oversees SARAHS Centre. The Director normally does not have a stipend but does receive a time release from teaching duties. The Steering Committee members contribute their time as part of their service requirement. The SARAHS Centre manages a Fragment Analysis and DNA Sequencing Service (FADSS). It provides DNA preparation, Fragment analysis, and DNA sequencing to SARAHS founding members and to external customers. The Director is responsible for administrating FADSS revenues and expenditures. The SARAHS Director is responsible for hiring and supervising one staff member who manages and runs FADSS as well as assists the director in running SARAHS as a whole. Presently, this staff member is hired full-time as a Research Assistant Tech V. Their annual stipend with benefits is \$61,276.32. This is the only position that SARAHS presently supports. In the first 4 years of existence this salary was supported both by FADSS revenue and a CFI Infrastructure Operating Fund (IOF). The IOF expired in March 09, thus the position has been funded solely through FADSS revenue since the expiration date

The New Institute: Its Organization, Governance and Reporting Plan

The Director, appointed by and reporting to the Provost will be a tenured Associate Professor or higher rank who is presently a UBC Okanagan faculty member (Fig. 1). The term of the Director's appointment is normally five years, subject to negotiation between the Provost and the appointee. At least for the next five years, the Director will not have a stipend but will receive a time release from their teaching duties. The Director shall chair the Steering Committee and conduct day-to-day administration. The Institute will have an advisory board in place and will consist of the Director and at least 3 external members. The Provost, on recommendation by SARAHS Steering Committee and Director, will appoint advisory board members.

The Institute for the first 3 years will have two staff members, a Manager and a Technician III. The Director will supervise the Manager who will, in turn, supervise the Technician III. In year 3, an Administrative assistant will be hired, which will be funded by Fee-for-Service revenue. The director of SARAHS will submit an annual report to the Provost. A committee appointed by the Provost after 3 and 5 years following the initial implementation of the Institute will review the Institute.

The New Institute: Its Membership and Affiliated Partners

The membership of SARAHS has quadrupled in the last 4 years. We anticipate that this membership will continue to increase as an institute. As an institute, SARAHS will continue to value partnerships within the University and with government, non-government, community, and international organizations. Partnerships include activities such as joint research, funding agreements, student supervision, dissemination or application of research.

The New Institute: Budget Projection and Business Plan

The budget projection lists the SARAHS budget for this fiscal year and for the following five years (budget projection on file with the Provost). This budget projection is conservative and as an Institute we anticipate much faster growth. As an Institute, we will need our staff to spend more time on securing external partnerships, marketing our services, maintaining the website, raising funds, organizing meetings and workshops and on supervising the technical staff. To accomplish this, we propose to hire a manager to perform these duties. As part of the Institute budget, we are requesting \$61,276.32 per annum for the next five years or until additional funds are secured through the methods described below under *A Plan for Fund Raising and Revenue Generation* to fund the manager position. We will continue to hire a technician, but at the level of a Technician III. Thus, the staff of the new SARAHS Institute as compared with the existing Centre will be expanding to allow us to be sustainable within 5 years. The funds to hire a Tech III will be made available from revenue generated from our Fee for Service operation (Fragment Analysis and DNA Sequencing Service, FADSS). Within the first 3 years of

the Institute, we anticipate major growth and we anticipate the need to hire an Administrative Assistant.

The New Institute: A Plan for Fund Raising and Revenue Generation

The major expense for SARAHS will be staff salaries. Revenues from the core facilities will partly cover this expense. Plans to apply for grants and to increase our revenues of the FADSS core facility are in place to cover existing and future hiring's. The success of these plans are not guaranteed, thus we will need to work diligently over the next 5 years with the Development Office and other external organization like FORREX to secure a minimum endowment of at least \$1 million to be sustainable without financial support from UBC Okanagan. The intention is to meet once every two months with these organizations until money is secured.

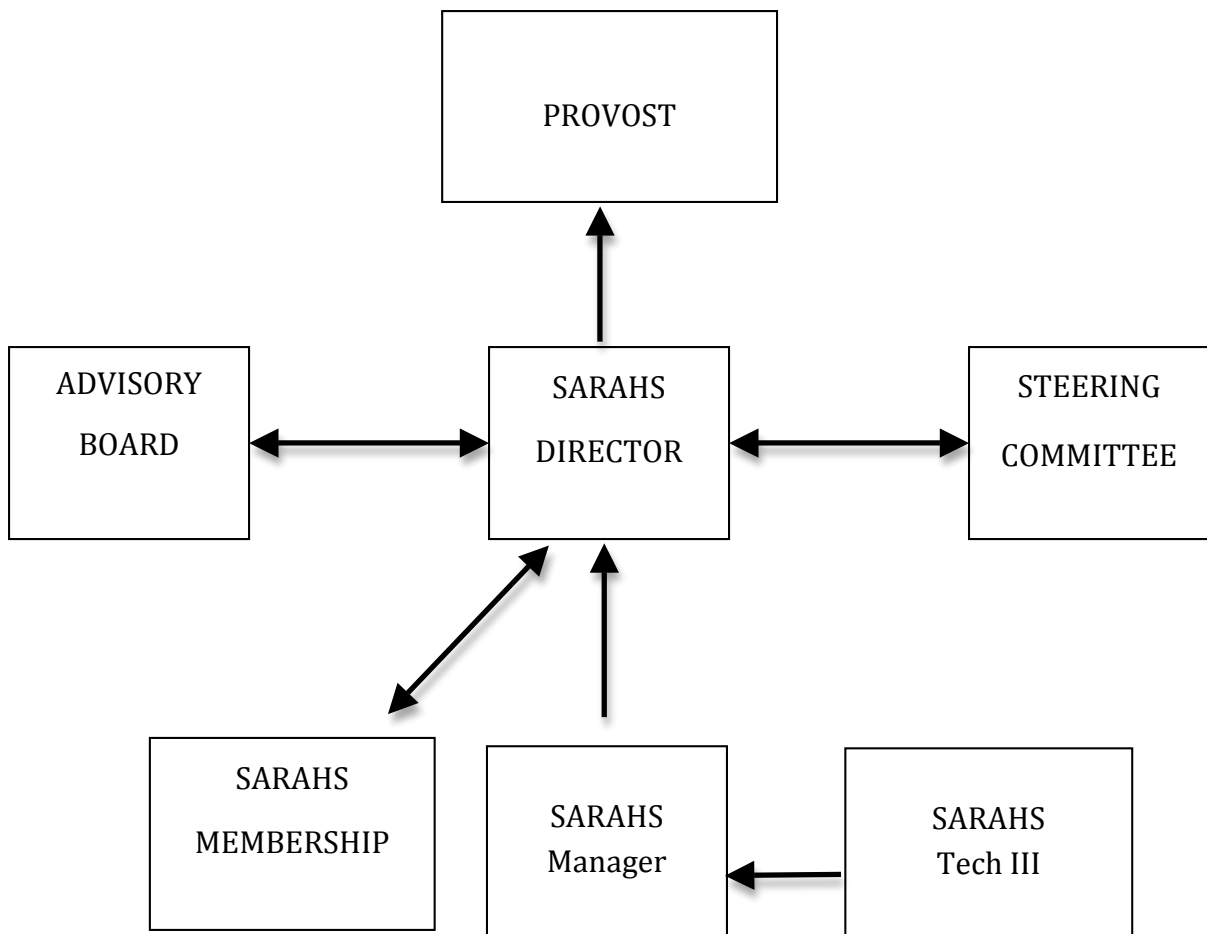


Fig. 1. Administrative levels and reporting

**A PROPOSAL TO THE UBC OKANAGAN SENATE FOR
ESTABLISHMENT OF:
THE INSTITUTE FOR SPECIES AT RISK AND HABITAT STUDIES
(SARAHS)**

Submitted

By

**Daniel M. Durall
(Current Director of the Centre for SARAHS)**

On

25 March 2010

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VISION STATEMENT

The Institute for Species at Risk and Habitat Studies (SARAHS) is committed to advancing efforts to protect species and ecosystems through interdisciplinary research, training and community engagement.

MISSION

The Institute for SARAHS will be internationally recognized for its interdisciplinary, conservation-oriented research by addressing questions of local and global importance. SARAHS will place The University of British Columbia Okanagan at the forefront of research and management on species and ecosystems at risk. Through the integration of approaches at multiple scales, from the molecule to the ecosystem, SARAHS will become a leading international centre for the training of highly qualified undergraduate, graduate and postgraduate personnel. These researchers will be uniquely positioned to bridge disciplinary barriers to inform and guide effective conservation research and management strategies. In addition to fostering strategic partnerships with First Nations, government, industry, and non-governmental organizations, a defining feature of the SARAHS mandate will be active engagement with community stakeholders including educational outreach and stewardship activities. As an Institute, we will plan to expand our mission past the Faculties of Creative and Critical Studies and Arts and Science by collaborating with members of other faculties, including The Faculty of Applied Sciences, The Faculty of Health and Social Development and The Faculty of Management.

STRATEGIC DIRECTIONS

The strategic directions for SARAHS are:

- I. Provide Undergraduate, Graduate and Postdoctoral Training Opportunities**
- II. Secure Funding for Infrastructure, Training, and Research**
- III. Add to and build on our existing Partnerships**

- IV. Translate Research into Action**
- V. Enhance our Existing Profile and Increase our Visibility**
- VI. Build Core Teams to address our identified strategic areas**

(See Table 2 for detailed business plan associated with strategic directions)

CONTEXT AND RATIONALE

RELEVANCE TO LOCAL, NATIONAL AND INTERNATIONAL NEEDS

Human modification of the environment at a global level, including large-scale habitat conversion and soaring greenhouse gas emissions, exerts significant pressures on ecosystems, threatening the essential goods and services they provide and the substantial biological diversity they harbour. These impacts have been quantified and well-documented:

- Species extinction rates are estimated at 100 to 1000 times background levels
- In 1999, 120% of the Earth's regenerative capacity (foods and goods) was consumed by humans
- Environmental damage caused by the approximately 50,000 alien-invasive species in the United States, coupled with the costs of controlling these species, exceeds \$120 billion per year.
- Rapid human-induced global warming is threatening biodiversity as well as human societies

Nationally, Canada's uniqueness in global biodiversity and habitat protection lies in its large land-mass in northern latitudes, containing high proportions of global boreal forest and tundra. As well, it has a high number of species that have their northern range margins within its borders.

At a local level, an estimated 250 species in the Okanagan-Similkameen region of southern BC alone (3% of the provincial area) are of conservation concern, the vast majority of which are so ranked because of their highly restricted distributions within Canada. In addition, the attractiveness of the economy, climate, and lifestyle of the southern interior is causing increasing pressure on the habitats in which these organisms live. Thus, the southern interior of BC provides a living laboratory to address challenges associated with threatened populations and ecosystems and ensuing conflicts with human activities.

In response to these varied threats, SARAHS opened in March 2006 at the University of British Columbia Okanagan to enable interdisciplinary research on the structure and function of habitats and populations of species at risk. SARAHS faculty and students currently come from diverse backgrounds in Biology, Chemistry, Mathematics, Physical Geography, and Earth and Environmental Sciences. Accordingly, SARAHS research activities combine field, laboratory and theoretical approaches to address complex environmental questions. Strategic integration of resources and geographic proximity to the Okanagan Valley, one of the four most endangered eco-regions in Canada, has uniquely situated SARAHS as an emerging leader in conservation science.

COHERENCE WITH UBCO STRATEGIC RESEARCH PLAN

The SARAHS mission and vision are closely aligned with the UBCO Strategic Research Plan (2009-2014). The UBCO Strategic Research Plan emphasizes the importance of interdisciplinarity, partnerships and excellence in research, all demonstrated strengths of SARAHS. “Sustainable Environments and Populations” is noted as one of six Areas of Research Priority, specifically naming SARAHS as an established entity of multidisciplinary strength to lead “research on environmental quality, adaptive responses and sustainable development (to) inform management and policy decisions that contribute to healthy environments for people and other organisms.”

COHERENCE WITH UBCO ACADEMIC PLAN

SARAHS exemplifies two of the imperatives of the UBCO Academic Plan (2005), “An Integrated Research Community” and “A Locally Responsive, Globally Conscious Community,” in its composition, scope and vision. SARAHS conducts “a broad spectrum of research (basic-applied, local-global)” (see Research Areas) that benefits from the interdisciplinarity of its faculty and partners; both are Pathways identified in the Academic Plan. A primary aim of SARAHS is to provide “outstanding student experiences and achievements”, another Pathway identified in the Academic Plan, through SARAHS seminars, workshops and access to leading-edge infrastructure. Additionally, we are developing a proposal for the SARAHS NSERC Collaborative Research and Training Experience (CREATE) Program designed to broaden perspective from traditional disciplinary-based programs, and provide students with marketable skills, exposure to potential employers, and tangible deliverables in addition to a first-class graduate degree. SARAHS has a proven track record of recruiting international graduate and undergraduate students. Also consistent with the “internationalization” pathway of the Academic Plan, our proposed development of graduate student exchange programs with universities in less-developed countries will further expand the number of international students. Similarly, continued success in recruiting and training high-potential undergraduates has been and will remain a primary focus for SARAHS faculty. These achievements that “integrate teaching and research” have led SARAHS to be featured by UBC international undergraduate student recruiters, establishing important feedback for increasing the diversity and breadth of the Centre’s students.

COHERENCE WITH THE UBC ABORIGINAL STRATEGIC PLAN

SARAHS’ focus on partnerships and community-based research is in accordance with the UBC Aboriginal Strategic Plan (Draft October 22, 2008), which emphasizes the importance of engaging in collaborative research with Aboriginal communities and finding “ways to support research that respects and benefits Aboriginal communities” (p. 10). From our founding, we have sought relationships with the local communities; the Okanagan Nations Alliance offered a letter of support for our original CFI funding. A number of discussions have already occurred between Centre researchers and members of Aboriginal

communities regarding research collaborations, and we have supported several Aboriginal graduate and undergraduate students. Our strategic plan includes enhancing our training of Aboriginal students, targeting Aboriginal faculty as potential SARAHS members, and continuing to explore more formal partnerships with local Aboriginal communities.

SCOPE

SARAHS focuses on research addressing ways to mitigate the world's biodiversity crisis. The SARAHS mandate is to conduct and disseminate world-class research and training directed towards species considered to be globally at-risk, as well as addressing ways to mitigate fragmented habitats, damaged ecosystem services, and rapidly warming climate.

Specifically, we are committed to:

- conducting cutting-edge research in our identified research themes
- providing world-class training opportunities for graduate students and postdoctoral researchers
- offering substantial opportunities for undergraduate research experience
- fostering an international community of scholars

We strive to work across a range of topics, from specific projects with local relevance to broader theoretical projects with global implications to international projects with colleagues around the globe. Currently, our key research projects fall within the three major themes detailed below

AREAS OF RESEARCH FOCUS

In this section, we outline three major themes of research undertaken by SARAHS researchers—themes that are emergent from the varied interests of our membership, as well as central to global problems of biodiversity conservation. Indeed, SARAHS researchers are engaged in many more projects than the ones highlighted here. We give

just a few subthemes and examples of specific research projects in each major theme, chosen to illustrate the diversity of topics, species, and collaborations occurring within the Sciences and Arts. Almost all of these research projects involve graduate and/or undergraduate students. As we move to an Institute, we will have a greater diversity of research projects encompassing those from not only the Arts and Science and Creative and Critical Studies but from Health, Engineering and Management.

I. IDENTIFYING AND MANAGING SPECIES AND HABITATS AT RISK

(i) Basic biology

Successful conservation of species and habitats at risk requires accurate information about the fundamental biological characteristics of the organisms and ecosystems in question.

SARAHS researchers are filling critical knowledge gaps surrounding the basic biology of at-risk species and habitats within the Okanagan and in a variety of settings globally. Specific examples:

- Demography, dispersal, and population genetic structure of Behr's Hairstreak Butterflies, a nationally Threatened species that occupies one of the four most endangered ecosystems in Canada, the antelope-brush shrublands of the south Okanagan. (Lead faculty: Desjardins, Keyghobadi, Pither,).

- Impacts of forest fragmentation (via fires and forestry activities) on the 10-year population cycle of snowshoe hares. Snowshoe hares are a pivotal prey species in most coniferous forests in the US and Canada, and managing for them is integral to protecting the Canada lynx, a federally Threatened species in the US. (Lead faculty: Hodges, Tyson)

- Importance of ectomycorrhizal fungi in the establishment of Douglas-fir seedlings. Large trees form major belowground hubs in a network where younger trees are connected to older trees via root symbiotic (mycorrhizal) fungi, but these networks may be disrupted in the face of forestry activities, water stress, and climate change. (Lead faculty: Durall)

(ii) Conservation Units

Facing the rapid decline of biological diversity, conservation biologists continue to search for methods that can distinguish unambiguous units for conservation purposes. Genetics-based criteria now play a central role in designating such conservation units. Specific examples:

- Identifying cryptic diversity and conservation units in a wide range of at-risk organisms, including Bahamas parrots, Galápagos tortoises, Amur tigers, saltwater crocodiles and Okanagan Lake kokanee. (Lead faculty: Russello).

(iii) Critical habitat

From both ecological and legal standpoints, identifying critical habitat—defined by US and Canadian laws as habitat that need special management as it is essential for survival of the at-risk species—represents a key challenge in conservation efforts. Specific examples:

- Critical habitat designation under the US Endangered Species Act. These projects examine (a) how the law, its policies, biological information, and court cases interacted to affect final determinations, and (b) the mismatch between policy and how criteria are actually used by US government biologists during the designation process. (Lead faculty: Hodges)

- Obtaining habitat information relevant to critical habitat designation. Several SARAHS researchers have data that are being used by government biologists to designate critical habitat, including for Canada lynx in the US and Great Basin gophersnakes, Mormon metalmarks, Great Basin spadefoot, and Behr's Hairstreak butterflies in Canada. (Lead faculty: Desjardins, Hodges, Russello)

(iv) Recovery planning

Species recovery planning and habitat restoration are often essential to ensuring the long-term persistence of at-risk species and ecosystems. Specific examples:

- Identifying characteristics of the Behr's Hairstreak and Mormon Metalmark butterflies' habitat that are essential for maintaining populations of these species. This research

informs decisions as to which sites should be protected and whether the current habitat protection targets are sufficient. (Lead faculty: Desjardins)

II. UNDERSTANDING AND PREDICTING BIOTIC RESPONSES TO CHANGING ENVIRONMENTS

(i) Adaptation

Understanding how natural and human disturbances affect the ecology and physiology of flora and fauna is critical to conservation of species in the face of the current substantial changes in climate and habitats. A number of SARAHS researchers have projects that evaluate adaptive changes of species to changing environmental conditions. Specific examples:

- The genetic basis of adaptation (e.g. thermal tolerance) to climate change of the American Pika. Pikas are potentially threatened by climate-induced changes of their alpine habitats. (Lead faculty: Russello)

- The molecular and physiological basis of adaptations in insects, fish, and amphibians exposed to metals and organic pollutants in the environment. Individually and collectively these research projects provide valuable information for the development of appropriate conservation policy and environmental toxicology guidelines. (Lead faculty: Mathieson, Reid, Rheault)

(ii) Habitat connectivity and geographic range shifts

Many geographic ranges of organisms are shifting as a consequence of environmental change, especially global warming. Some species, such as many butterflies, are proving adept at taking advantage of new habitats, while others, such as the polar bear, appear to be seriously threatened by climate-induced changes in their environment. Human-induced disruptions in habitats, as well as natural barriers, may prevent some species from shifting ranges. To protect species from climate-induced extinctions, it is important to be able to forecast which species are most at-risk, develop mitigation strategies, and enable movements to new habitats.

- Mountain pine beetles and other forest pests are currently undergoing outbreaks that are partially attributable to climate change. Understanding their movement patterns across fragmented forest landscapes is key to mitigating their damage to forests. (Lead faculty: Desjardins, Lalonde, Tyson)

- Understanding previous climate changes helps explain current patterns of diversity. Remains of larval chironomids provide useful chronosequences of climate information from previous millennia that can be used to elucidate and anticipate biotic responses to current climate shifts. (Lead faculty: Walker)

(iii) Community shifts

Changes in the environment often lead to shifts in the ecological communities, including local extinctions of some species and introductions of others. These changes can have important consequences to humans and other organisms, so it is imperative we advance our knowledge of how communities form and change in response to various perturbations.

- Pollinator services in the Okanagan. Habitat change and disease are affecting the numbers and kinds of insect pollinators of both native and agricultural plants. Research efforts aim to quantify the value of wild bee populations, their distribution on the landscape and the amount of native habitat that is necessary to sustain them (Lead faculty: Pither)

- Insect biocontrol of invasive plants. Current work on invasive houndstongue, a weevil control agent, and two native flowering species will elucidate whether the introduced weevil is a threat to native species. (Lead faculty: Lalonde, Pither)

- Recolonization of soil fungal communities after forest harvest. Soil fungi, including both saprotrophic and mycorrhizal fungi are essential for nutrient acquisition by plants. Knowing how fungal communities shift following harvest and what fungal community supports seedling growth and development will allow for improved management of forested land. (Lead faculty: Durall, Hart, Jones, Klironomos,)

III. SUSTAINING RESOURCES AND ECOSYSTEM SERVICES IN NATURAL AND MANAGED LANDSCAPES

Human societies would not exist without the numerous resources and beneficial services provided to them by healthy ecosystems. Yet human activities are increasingly compromising the ability of ecosystems to provision these resources and services in a sustained way. To successfully maintain the long-term health of ecosystems, practitioners require more and better information about (i) the quality and quantity of services provided to humanity by ecosystems, (ii) the current and future threats to ecosystems and the services they provide, and (iii) “best practice” methods for sustaining ecosystem health.

- Quantifying pollinator services to Okanagan tree fruits and threats to native pollinators. (Lead faculty: Lalonde, Pither, Tyson, Janmaat)

- Identifying the impact of different forestry practices on the nutrient cycling processes performed by soil fungal communities that are essential to seedling growth within managed forests. This knowledge will allow forest managers to select the most appropriate management protocols to achieve a sustainable forest. (Lead faculty: Durall, Jones)

- Identifying the best practices for minimizing the negative impacts of logging within headwater regions on downstream water quality and quantity (Lead faculty: Wei)

PARTNERSHIPS

SARAHS values partnerships within the University and with government, non-government, community, and international organizations. Partnerships include activities such as joint research, funding agreements, student supervision, dissemination or application of research.

Below, we show a few of the groups with whom we have established links:

Within The University of British Columbia

Okanagan Sustainability Institute (Okanagan)

Watershed Science Research Group (Okanagan)

Beatty Biodiversity Research Centre (Vancouver)

Centre for Applied Conservation Biology (Vancouver)

With governmental agencies:

CANADA

Environment Canada

Canadian Wildlife Service

Parks Canada

Agriculture Canada

BC Ministry of Environment

BC Ministry of Forests & Range

Canadian Food Inspection Agency

Department of Defense

City of Armstrong

Natural Resources Canada

INTERNATIONAL

US National Park Service

US National Forest Service

Montana Fish, Wildlife and Parks

US Department of Agriculture

L' institut nat. de la recherche. agronom. (France)

With non-governmental entities:

Island Conservation

South Okanagan Similkameen Conservation Program

Wildlife Conservation Society

American Museum of Natural History

Okanagan Basin Water Board

Nature Trust of BC

Get to Know

FORREX

With industrial partners:

Tolko

Tree Fruit Growers Association

Dobson Engineering Ltd.

Ecoscape Environmental Consultants Ltd.

DISSEMINATION AND APPLICATION OF RESULTS

March 22, 2010

The research carried out under SARAHS is directly applicable to many current problems facing societies around the world. Part of our mandate is to disseminate our results to governments, community groups, and other stakeholders. Although this mission is fulfilled in numerous ways, several specific examples already undertaken by our members are:

- Membership on national and international committees, e.g. Recovery Teams for species at risk in Canada, subcommittees of the Committee on the Status of Endangered Wildlife in Canada.
- Engagement with the South Okanagan Similkameen Conservation Program.
- Talks, brochures, and displays through venues such as The Desert Centre (Osoyoos), the Vernon Natural History Museum and through organizations such as FORREX and the Southern Interior Silviculture Committee
- Consulting with US and Canadian government personnel (e.g. US National Park Service, US Fish and Wildlife Service, Canadian Wildlife Service) on management of species at risk.
- Published research in peer-reviewed scientific publications, including international journals and book chapters.

TRAINING

One of our fundamental missions is to provide exceptional training for undergraduate and graduate students, as well as postdoctoral scholars. This training usually consists of informal sessions between faculty or FADSS staff and the student or Post-doc. These do not impinge on formal training as outlined by the mandate of faculties and their units. The majority of our undergraduate participants are likely to come from Ecology and Evolutionary Biology, Zoology, Biology, Earth and Environmental Sciences, Microbiology and Mathematics. Graduate student participants will be primarily enrolled in Biology, Environmental Sciences, Mathematical Biology, and Interdisciplinary Graduate Studies. Undergraduate and graduate students in other programs are also welcome.

Hallmarks that our training mission is thriving include: a diverse international community of students; students that publish, present, and disseminate their thesis research nationally

and internationally; students that win awards and grants (e.g. prizes for best paper or presentation, success with NSERC and other fellowship or grant competitions); international recognition of our training programs; successful career placement of our graduates.

GOVERNANCE, MEMBERSHIP AND REPORTING

The SARAHS constitution (Appendix B) outlines our present structure as a centre. This basic governance structure will remain as an institute, but the staff, membership and administrative duties will expand. This expansion includes reporting (see Fig. 1) and review responsibilities as well as an addition of an Advisory Board. Briefly, the SARAHS Steering Committee advises a Director, who normally has a five-year term. Founding members have life membership; other interested faculty or people external to the University apply for 3-year terms as members and current members vote upon their applications. Students of faculty who are SARAHS members are automatically granted memberships; other students may apply. SARAHS has 82 members based on this membership structure (Table 1).

Table 1. Present members of SARAHS

Principal Investigator	Faculty	Department/ Unit	Undergraduate Students	Graduate Students	Post-Doctoral Fellows	Total Personnel
Sylvie Desjardins	A&S	M&S	1	1	0	2
Daniel Durall	A&S	BPG	1	3	0.5	4.5
Miranda Hart	A&S	BPG	0	0.5	1	1.5
Karen Hodges	A&S	BPG	2	3	0	5
Nancy Holmes	CS	CW				
John Janmaat	A&S	Economics	1	2	0	3
Melanie Jones	A&S	BPG	1	3	1.5	5.5
Nusha Keyghobadi (UWO)	Science	BPG	N/A	N/A	N/A	N/A
John Klironomos	A&S	BPG	0	0.5	2	2
Robert Lalonde	A&S	BPG	2	2.5	0	4.5
Karl Larsen (TRU)	Science	BPG	N/A	N/A	N/A	N/A
Bruce Mathieson	A&S	BPG	1	0	0	1
Susan Murch	A&S	Chemistry	0	2	0	2
Michael Pidwirny	A&S	BPG				
Jason Pither	A&S	BPG	1	3	0	4
Scott Reid	A&S	BPG				
Mark Rheault	A&S	BPG	2.5	2.5	0	5
Michael Russello	A&S	BPG	4	3	1	8
Rebecca Tyson	A&S	M&S	2.0	1.5	0	3.5
Ian Walker	A&S	BPG, EESC	2	1	0	3
Adam Wei	A&S	EESC	0	5	1	6
Total with PIs						82

A&S: Arts & Science; CS: Creative Studies; UWO: University of Western Ontario; TRU: Thompson Rivers university; N/A: students are not at UBCO and are not included in the

total; BPG: Biology and Physical Geography; M&S: Mathematics & Statistics; EESC: Earth and Environmental Sciences.

An internal committee appointed by the Provost after 3 and 5 years following the initial implementation of the Institute will review the Institute. As discussed below, the Director will submit an annual review to the provost. The external advisory board will consist of the Director and at least 3 external members, which will be selected externally to UBC Okanagan. The Provost on recommendation by SARAHS Steering Committee and the Director will appoint board members. The appointments will occur during the second year as an institute. The administrative levels and the reporting of the new SARAHS Institute are shown in Fig. 1.

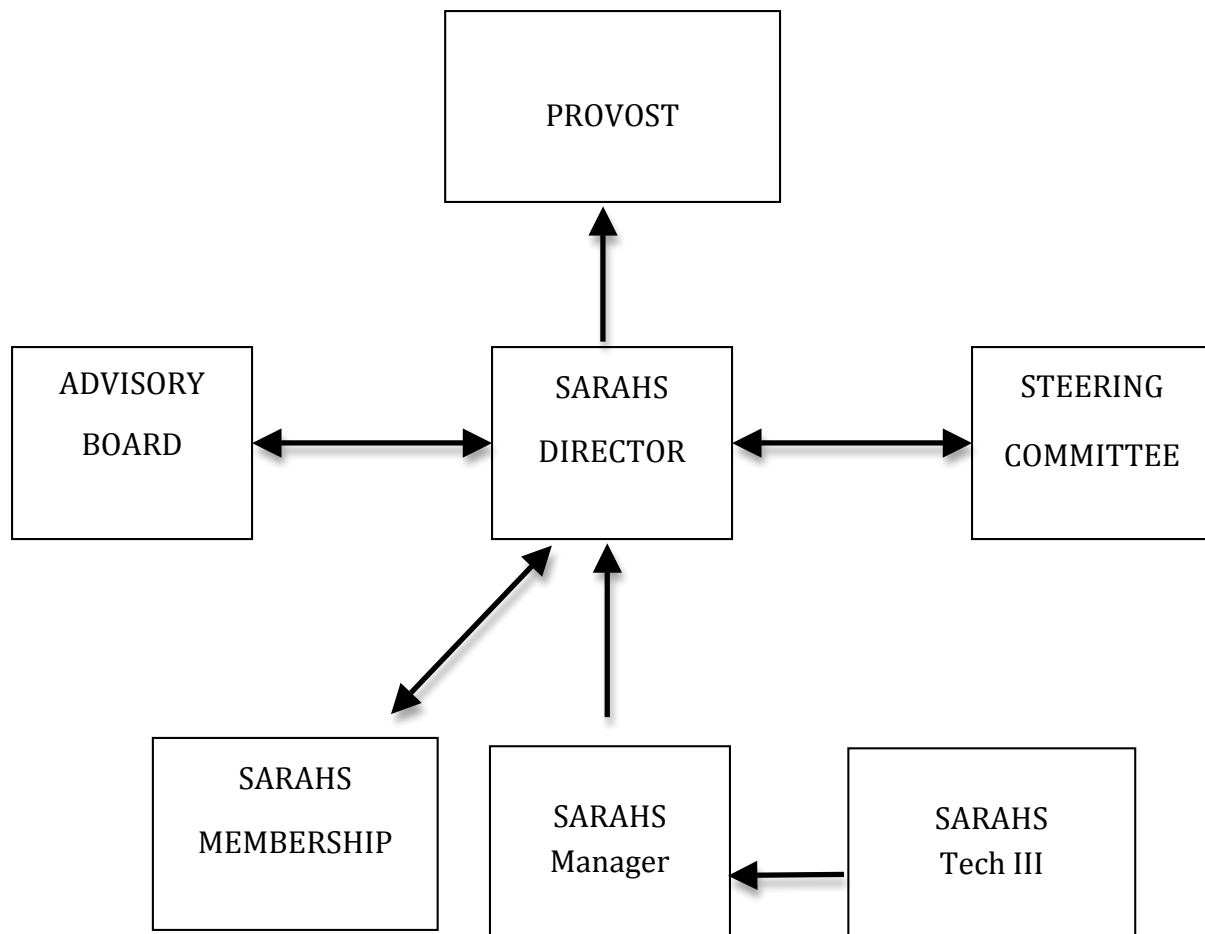


Fig. 1. Administrative levels and reporting

Staffing of the New Institute

The Director, appointed by and reporting to the Provost, will be a tenured Associate Professor or higher rank. The responsibilities include: day-to-day administration of the Institute, including budgetary matters, supervision of Institute staff, oversight of Institute resources and infrastructure, liaison and collaboration with, members, and affiliated partners, facilitating programs and functions to support research activities and research training, publicizing activities of the Institute to internal and external communities, supporting and coordinating research activities of principal investigators and producing an annual report. The provost will appoint this position during the second year of the institute.

SARAHS Manager will manage SARAHS Labs and the FADSS Fee-for-Service operation as well as help in marketing SARAHS products, design and maintain the web site, increase collaborations with industry and external partners, help organize conferences, workshops and retreats, help in the writing of external grants such as the NSERC CREATE or the CFI Leading Edge Fund and work with the Development Office to secure external funding. SARAHS manager will report directly to the director of SARAHS. They will be 1.0 FTE.

The Lab Technician III will report directly to the SARAHS manager. They will process DNA samples for members and external users, maintain equipment, providing a safe and efficient working lab environment. The Lab Tech III will be 1.0 FTE.

An Administrative Assistant will be required after the third year of operation as an Institute. They will provide administrative and financial support to the Institute Director (including monitoring of financial resources), and assist with member communications, promotion of SARAHS including assisting with web site maintenance. They will also assist with communication with industry and external partners.

FUNDING and OVERVIEW OF BUSINESS PLAN

As part of our business plan (shown in Table 2) we will hire a full-time SARAHS manager to help in hosting conferences and workshops, to improve ties with partners, to expand our web site presence, to supervise employees, to help when needed with the fee for service and to continue marketing SARAHS products (see Appendix A) . A major source of revenue for SARAHS is through FADSS, a fee for service operation, which provides DNA sequencing services to SARAHS members, the UBC Okanagan community, and external customers (see attached budget). One full-time technician presently operates it. For the last five years, in addition to the previously mentioned revenue, a CFI Infrastructure Operating Fund (IOF) has supported the operation of SARAHS. This fund has been spent and SARAHS is presently being supported by revenue generated from FADSS, but unfortunately this revenue at this time will not sustain SARAHS. To hire the new manager we will require a subsidy of \$61,276.32 from the University until external funding is secured. We will hire a Technician III with the revenue generated from the fee for service. The manager will supervise the Tech III. In collaboration with the UBC Okanagan Development Office and other external agencies (e.g., FORREX), we are actively pursuing financial support for our strategic plan through a possible endowment and by applying for a CFI Leading Edge Fund (LEF) in next December's CFI competition. We also applying for the NSERC CREATE fund. The intention of the business plan outlined in Table 2 is to hire the staff necessary to put in place a revenue generation process and to continue to generate revenue, allowing the Institute to be sustainable within a five-year period.

The majority of SARAHS researchers hold major external funding awards, including NSERC, BC Forest Sciences Program, NSF, and the US Department of Agriculture. A number of SARAHS PIs also hold contracts with government or other agencies. Several of our graduate students hold NSERC awards or Pacific Leader awards, as well as University Graduate Fellowships. SARAHS researchers have already received collaborative grants, and have applied for training programs. In the future, we anticipate that the SARAHS platform will increasingly facilitate these collaborative funding applications.

SPACE AND EXISTING RESOURCES

Thanks to a successful CFI grant in 2004, SARAHS has a number of laboratory facilities equipped with state-of-the-art instrumentation. On the third floor of the Science building, we have a soils lab, microscope room, physiology laboratory, computer/GIS laboratory, ecology laboratory, freezer room, cold rooms, preparatory room, and radio-isotope room. This space has helped to unify the SARAHS research group, and we have used it to enable many new faculty members—both members and non-members of SARAHS—while new facilities are being constructed. Although existing infrastructure will continue to support the SARAHS membership, we are approaching a position of needing more space to support our researchers to their full research potential.

Major space needs for the future include office space for graduate students, postdoctoral fellows, and visiting students or scholars, as well as space for staff. We also hold a regular seminar series and discussion groups, and will continue to need regular meeting spaces (classrooms, conference rooms) for this exchange of ideas.

Our primary resource, however, is our people. We have a diverse community of committed scholars who regularly work together on projects of global importance. In addition, we employ a Lab Tech V who is a unifying element of the SARAHS team and the position provides a resource of information, particularly in the molecular biology field, for undergraduates, graduate students, and faculty. SARAHS is a group of people and a place, together they create an environment for research, teaching and exchange of ideas. As a collective body, we are firmly committed to supporting SARAHS as an institute in which a diverse, international, and multi-disciplinary group of people can work together creatively and productively on widely varied projects.

TABLE 2. SARAHS Business Plan*STRATEGIC DIRECTION I: BUILDING CORE TEAMS TO ADDRESS IDENTIFIED STRATEGIC AREAS*

Objective	Strategy	Performance Measures	Targets
<p>SARAHS attracts and retains high quality researchers, community partners, and students to develop core research teams relevant to identified Strategic Areas</p>	<p>Recruit/invite high quality researchers, community partners/students</p> <p>Establish research priority themes as a focus</p> <p>Create incentives and seed funding to support development of research partnerships and pilot studies in identified research areas</p> <p>Secure Infrastructure, research and training grants (NSERC, CFI, SSHRC, NSF, NIH, USDA, DOD, USGS, EPA, PICS)</p> <p>Build research capacity to facilitate community level research participation (research workshops, training opportunities, habitat and species survey)</p> <p>Establish SARAHS Coordinator position to facilitate the development of mechanisms for the continued growth of interdisciplinary research teams and community partners. Manage core facilities and resources.</p> <p>Establish an Administrative Assistant position to provide administrative and financial support to the director and assist with member communications.</p>	<p>Attraction and retention of researchers and community partners</p> <p>Relative distribution of affiliated researchers/students/grants and publications in strategic research areas</p> <p>New research initiatives/funds for:</p> <ol style="list-style-type: none"> 1. Research programs in strategic areas 2. Student training 3. Pilot projects 4. Community outreach <p>Involvement of community partners/organizations involved in university-led research initiatives.</p> <p>Number of research teams supported by infrastructure grants in strategic research areas</p>	<p>Year 1</p> <ul style="list-style-type: none"> • ↑ to 28 active PI members • 3 affiliated research projects established in identified strategic areas • 1 formalized community partnership with SARAHS • Hire 1.0 FTE SARAHS manager • Hire 1.0 FTE technician III • Provost will appoint director <p>Year 2</p> <ul style="list-style-type: none"> • ↑ in membership to 100 members • 2-3 new affiliated research applications led by SARAHS researchers • <p>Year 3</p> <ul style="list-style-type: none"> • ↑ in membership to 110 members • 2-3 new affiliated research applications led by SARAHS researchers • Hire 1.0 FTE Administrative Assistant position <p>Years 4 & 5</p> <ul style="list-style-type: none"> • ↑ in membership to 120 members • 2-3 new affiliated research applications led by SARAHS researchers • Hire 1.0 FTE SARAHS

			Coordinator position
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STRATEGIC DIRECTION II: PROVIDING UNDERGRADUATE, GRADUATE, AND POSTDOCTORAL RESEARCH TRAINING OPPORTUNITIES

Objective	Strategy	Performance Measures	Targets
SARAHS facilitates undergraduate and graduate research opportunities through student mentorship and training opportunities	<p>Recruit high quality students</p> <p>Obtain funding for research internships, training awards (undergraduate, graduate, and postdoctoral fellowships)</p> <p>Apply for NSERC Collaborative Research and Training Experience Program (CREATE) to support undergraduate/graduate students and postdoctoral fellows</p> <p>Design and conduct Seminars and Workshops</p>	<p>Number of SARAHS Student Memberships</p> <p>Number of SARAHS affiliated students obtaining training awards in identified strategic areas</p> <p>Number of seminars/workshops and other training conducted</p> <p>Success in obtaining a CREATE grant.</p>	<p>Year1</p> <ul style="list-style-type: none"> • ↑ in student members • NSERC CREATE submission • SARAHS luncheon seminar series • 2 additional seminar/training workshops conducted <p>Year 2</p> <ul style="list-style-type: none"> • ↑ in student and postdoctoral membership to 20-25 members • ↑ student/training awards • SARAHS luncheon seminar series • 2 additional seminar/training workshops conducted <p>Year 3, 4 and 5</p> <ul style="list-style-type: none"> • ↑ student/training awards • SARAHS luncheon seminar series • 2 additional seminar/training workshops conducted

STRATEGIC DIRECTION III: SECURING FUNDING FOR INFRASTRUCTURE AND RESEARCH

Objective	Strategy	Performance Measures	Targets
<p>SARAHS is supported by basic operating funds from UBCO and secures additional funds from external sources for research and other needs to enable it to function as an innovative world class research organization</p>	<p>Annual funding provided from the Provost's office to support basic operational needs</p> <p>Apply for team grants to support the strategic research areas identified</p> <p>SARAHS Coordinator will assist with securing funding for infrastructure and research</p> <p>Meet with government representatives (e.g. B.C. Ministry of Environment) and major NGOs (e.g. Island Conservation) regarding funding support for research activities and people</p> <p>Maintain connections with UBCO Development Office to present interested donors with options for supporting SARAHS's research and infrastructure needs</p> <p>Build connections with external organizations and university organizations to promote resource sharing</p> <p>Apply to funding opportunities such as the Canadian Foundation for Innovation and Western Economic Diversification Programs to expand and update research and training infrastructure</p> <p>Develop community support through organized fundraisers and web site donations.</p>	<p>Resources for basic operating costs received from Provost's Office</p> <p>Number of grants awarded to SARAHS affiliated members in identified strategic research areas</p> <p>Number of Infrastructure grants submitted by SARAHS</p> <p>Number of meetings held with government and NGO representatives</p> <p>Support received from external funding (\$ value)</p> <p>Securing a significant single benefactor donation for the support of SARAHS.</p> <p>Number of partnership agreements/MOUs signed with external organizations that include resource sharing</p>	<p>Year 1</p> <ul style="list-style-type: none"> • New CFI Leading Edge Fund grant submission to build on previous CFI Infrastructure grants • 5-10 new affiliated research applications led by SARAHS researchers <p>Year 2</p> <ul style="list-style-type: none"> • 5-10 new research applications led by SARAHS researchers <p>Year 3</p> <ul style="list-style-type: none"> • 5-10 new research applications led by SARAHS researchers <p>Year 4</p> <ul style="list-style-type: none"> • 5-10 new research applications led by SARAHS researchers <p>Year 5</p> <ul style="list-style-type: none"> • 5-10 new research applications led by SARAHS researchers

STRATEGIC DIRECTION IV: DEVELOPING PARTNERSHIPS

Objective	Strategy	Performance Measures	Targets
<p>SARAHS develops a broad spectrum of partnerships and engages with them in collaborative research and information dissemination</p>	<p>SARAHS Coordinator will foster liaison with service settings (FADSS, universities, and NGOs)</p> <p>Explore local, national, and international responses and needs in the identified strategic research areas</p> <p>Identify strategic partners and stakeholders (related to identified strategic areas)</p> <p>Revise current membership process to include additional forms of partners and stakeholders.</p> <p>Develop an MOU template and process; (for data sharing, etc.) for use with partners</p> <p>Present workshop in collaboration with FORREX on Species at Risk for local partners and First Nations</p> <p>Present international conference on Species at Risk as affected by Climate Change</p>	<p>SARAHS Coordinator in place to facilitate development of partnerships and engage stakeholders</p> <p>Number of formalized partnerships/MOUs in place</p> <p>Number of external members from a variety of membership categories</p>	<p>Year 1</p> <ul style="list-style-type: none"> • 1 or 2 signed MOU/partnerships • 25-30 members <p>Year 2</p> <ul style="list-style-type: none"> • 1 or 2 additional MOU/partnerships • 10 new members <p>Year 3</p> <ul style="list-style-type: none"> • 1 or 2 additional MOU/partnerships • 10 new members <p>Year 4</p> <ul style="list-style-type: none"> • 1 additional MOU/partnership • 5-10 new members <p>Year 5</p> <ul style="list-style-type: none"> • 1 additional MOU/partnership • 5-10 new members

STRATEGIC DIRECTION V: TRANSLATING RESEARCH INTO ACTION

Objective	Strategy	Performance Measures	Targets
<p>SARAHS is recognized as a leader in communication of information regarding Species at Risk and Habitat Studies</p>	<p>SARAHS Coordinator will facilitate communication between research projects and support the dissemination of research material and information to the public.</p> <p>Create forums for the exchange of knowledge with policy makers, all levels of government, and the community.</p> <p>Convene annual conference to highlight the research and training activities of SARAHS</p>	<p>SARAHS Coordinator hired to facilitate dissemination of research activities, organize newsletters, websites, public relations, etc</p> <p>Number of forums and events organized by SARAHS</p> <p>Sponsored research symposium at international meeting</p> <p>Annual SARAHS conference held</p>	<p>Year 1</p> <ul style="list-style-type: none"> • ↑ in press releases regarding SARAHS <p>Year 2</p> <ul style="list-style-type: none"> • FT SARAHS Coordinator • Biannual electronic newsletter emailed to all members • ↑ in press releases regarding SARAHS activities • Symposium related to SARAHS research held at national or international conference <p>Year 3</p> <ul style="list-style-type: none"> • Quarterly electronic newsletter emailed to all members • Initial annual SARAHS conference held at UBCO • ↑ in press releases regarding SARAHS activities <p>Years 4 and 5</p> <ul style="list-style-type: none"> • Quarterly electronic newsletter emailed to all members • Annual SARAHS conference held at UBCO • ↑ in press releases regarding SARAHS activities

STRATEGIC DIRECTION VI: ENHANCING OUR EXISTING PROFILE AND INCREASING OUR VISIBILITY

Objective	Strategy	Performance Measures	Targets
<p>SARAHS is recognized as an international leader in identified strategic research areas and facilitates interdisciplinary research and public interaction</p>	<p>Design Logo and branding</p> <p>Design and develop website</p> <p>Develop a communications strategy and plan</p> <p>Host annual open houses</p> <p>Create an on campus office/space for SARAHS to connect with partners.</p>	<p>SARAHS Coordinator position established</p> <p>Communication infrastructure developed for the website, e-newsletter, Annual Report</p> <p>Communications strategy and plan in place</p> <p>Number of annual open houses held</p> <p>↑ SARAHS' profile in the university community and the community outside the university</p>	<p>Year 1</p> <ul style="list-style-type: none"> • Logo designed • website developed • Campus partner office space delineated • Annual report completed • Initial communication plan developed • Initial open house held <p>Year 2</p> <ul style="list-style-type: none"> • Updates to website • Second annual open house held • Conference symposium organized <p>Year 3</p> <ul style="list-style-type: none"> • Updates to website • Third Annual open house held • Initial annual SARAHS conference held at UBCO <p>Year 4</p> <ul style="list-style-type: none"> • Updates to website • Fourth Annual open house held • Annual SARAHS conference held at UBCO <p>Year 5</p> <ul style="list-style-type: none"> • Updates to website • Fifth Annual open house held • Annual SARAHS conference held at UBCO

APPENDIX A. SARAHS PUBLICATIONS AND MEDIA PRESENTATIONS

SARAHS Publications in 2008/2009 (SARAHS PIs in Bold)

1. Antunes PM, Koch AM, Dunfield KE, **Hart MM**, **Klironomos JN**. 2008. Community responses of native arbuscular mycorrhizal (AM) fungi to the introduction of foreign AM fungal inoculum. *Plant and soil* 317: 257-266.
2. Antunes P, **Klironomos J**, Miller J, Carvalho L, and Newman, J (2008) Even after death the endophytic fungus of *Schedonorus phoenix* reduces the arbuscular mycorrhizas of other plants. *Functional Ecology* 22, 912-918.
3. Banack SA, Cox PA, and **SJ. Murch** (2008) Flying Fox Consumption and Human Neurodegenerative Disease in Guam. In: *Evolution, Ecology, and Conservation of Island Bats*. T. Fleming and P. Racey (Eds)
4. Banack SA, **Murch SJ** (2009) Multiple neurotoxic items in the Chamorro diet link BMAA with ALS/PDC. Amyotrophic Lateral Sclerosis. (in press)
5. Beiler, Kevin J., **Daniel M. Durall**, Suzanne W. Simard, Sheri A. Maxwell and Annette M. Kretzer. 2009. Architecture of the wood-wide web: Rhizopogon spp. genets link multiple Douglas-fir cohorts. *New Phytologist*. doi: 10.1111/j.1469-8137.2009.03069.x (early online) In Press.
6. Brodersen, K.P., O. Pedersen, **Ian R Walker** and M. T. Jensen. "Respiration of midges (Diptera) in British Columbian lakes: oxy-regulation, temperature and palaeo-indicators". *Freshwater Biology*. 53 (2008): 593 - 602.
7. Callaway RM, Cipollini D, Barto K, Thelen GC, Hallett SG, Prati D, Stinson K, and **Klironomos J** (2008) Novel weapons: invasive plant suppresses fungal mutualists in America but not in its native Europe. *Ecology* 89, 1043-1055.
8. Calvo Polanco **M**, **Jones MD**, Zwiazek JJ 2009. Effects of pH on NaCl resistance of American elm (*Ulmus americana*) seedlings inoculated with *Hebeloma crustuliniforme* and *Laccaria bicolor*. *Acta Physiologia Plantarum* DOI 10.1007/s11738-008-0260-5
9. Calvo Polanco M, Zwiazek JJ, **Jones MD**, MacKinnon MD. 2008. Responses of mycorrhizal jack pine (*Pinus banksiana*) seedlings to NaCl and boron. *Trees – Structure and Function* 22: 825-834.
10. Calvo Polanco M, Zwiazek JJ, **Jones MD**, MacKinnon. 2009. Effects of NaCl on responses of ectomycorrhizal black spruce (*Picea mariana*), white spruce (*Picea glauca*) and jack pine (*Pinus banksiana*) to fluoride. *Physiologia Plantarum* 135: 51-61.
11. Campbell DB, Bulmer CE, Philip LJ, Zwiazek JJ, **Jones MD**. 2008. Incorporation of topsoil and burn-pile debris substantially increases early growth of lodgepole pine on landings. *Can. J. For. Res.* 38:257-267.
12. Carvalho LM, Antunes PM, Martins-Loução MA, Klironomos JN (XXXX) Disturbance influences the outcome of plant-soil biota interactions in the invasive *Acacia longifolia* and in native species. *Oikos*, in press.
13. Chase, M, C Bleskie, **IR Walker**, D Gavin and FS Hu. "Midge-inferred Holocene summer temperatures in Southeastern British Columbia, Canada". *Palaeogeography Palaeoclimatology Palaeoecology*. 257 (2008): 244 - 259.
14. Chen W. and **X. Wei**. 2008. Assessing the Relations between Aquatic Habitat Indicators and Forest Harvesting at Watershed Scale in the Interior of British Columbia. *Forest Ecology and Management*: 256: 152–160

15. Chen, M.Q., **X. Wei** and T. Liu. 2008. Public participation in land use planning abroad and its implications for China. *Land Research and Development*, 27(6): 100-104. (in Chinese)
16. Chen, X., **X. Wei**, R. Scherer and D. Hogan. 2008. Effects of large woody debris on surface structure and aquatic habitat in forested streams, Southern Interior British Columbia, Canada. *River Research and Applications*, 24:862-879.
17. Ciofi, Claudio, Adalgisa Caccone, Luciano Beheregeray, Michel Milinkovitch, **Michael Russello** and Jeffrey Powell. 'Genetics and conservation on islands: the Galápagos giant tortoise as a case study'. *Population Genetics For Animal Conservation* (2009). Ed. G. Bertorelle, M. Bruford, H. Hauffe, A. Rizzoli, C. Vernesi. Cambridge University Press.
18. Cole IB, Cao J, Alan AR, Saxena PK, **Murch SJ** (2008) Comparisons of *Scutellaria baicalensis*, *Scutellaria lateriflora* and *Scutellaria racemosa*: Genome size, antioxidant potential and phytochemistry. *Planta Medica* 74:474-481.
19. Cole IB, Farooq FT, and **SJ Murch** (2009) Protocols for Establishment of an In Vitro Collection of Medicinal Plants in the Genus *Scutellaria*. In: *Methods in Molecular Biology*. SM Jain and PK Saxena, (eds).
20. Constible, J.M., P.T. Gregory, and **K.W. Larsen**. 2009. The pitfalls of extrapolation in conservation: movements and habitat use of a threatened toad are different in the boreal forest. *Animal Conservation* early view publication.
21. Cox, P. A., Banack, S. A., and **Murch, S. J.** (2008). Cyanobacteria, Cycads, and Chamorros: A Medical Mystery. In: *Proceedings of the Seventh International Conference on Cycads*. R. Osborne, A. P. Vovides, and D. S. Stevenson (Eds.). ISBN-13: 9780893274900
22. De Deyn GB, Biere A, van der Putten WH, Wagenaar R, **Klironomos JN** (2009) Chemical defense, mycorrhizal colonization and growth responses in *Plantago lanceolata* L. *Oecologia* 160, 433-442.
23. Gabora, L., **Holmes, N.** 2008. "Dangling from a Tassel on the Fabric of Socially Constructed Reality: Reflections on the Creative Writing Process." In A. Cropley, D. Cropley, J. Kaufman, & M. Runco (Eds.) *The Dark Side of Creativity*. Cambridge UK: Cambridge University Press. TBA
24. Gavin, Daniel G., Hu, F. S., **Ian R. Walker** and Karlyn Westover. The northern inland temperate rain forest of British Columbia: Old forests with a young history? *Northwest Science* 83 (2009): 70-78.
25. Gonçalves da Silva, A., White, K.E., Kirk, S.L., Bishop, C.A., **Hodges, K.E.** and **Russello, M.A.** Isolation and characterization of microsatellite loci in two British Columbia species-at-risk: Great Basin spadefoot (*Spea intermontana*) and Western painted turtle (*Chrysemys picta belli*). *Conservation Genetics Resources*: in press.
26. Gonçalves da Silva, Anders, Danielle Lalonde, and **Michael Russello**. 'Isolation and characterization of microsatellite loci in a Neotropical ungulate, the lowland tapir (*Tapirus terrestris*).' *Conservation Genetics Resources* (2009): in press.
27. Gordon AM, Thevathasan NV, **Klironomos J**, Bradley R, Shipley B, Cogliastro A, Olivier A, and Whalen J (2008) Agroforestry in the world: lessons for Canada. *Policy Options* 2, 79-82.
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- modern pollen assemblages: an example from British Columbia". *Journal Of Biogeography* 36 (2009): 626-638.
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 35. Hillis DG, Antunes P, Sibley PK, **Klironomos JN**, and Solomon KR (2008) Structural responses of *Daucus carota* root organ cultures and the arbuscular mycorrhizal fungus, *Glomus intraradices*, to 12 pharmaceuticals. *Chemosphere* 73, 344-352.
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 37. **Hodges, K.E.** 2008. Defining the problem: ecological terminology and progress in ecology. *Frontiers in Ecology and the Environment* 6: 35-42.
 38. **Hodges, K.E.** and J. Elder. 2008. Critical habitat designation under the ESA: court-ordered designations use more criteria. *Biological Conservation* 141: 2662-2668.
 39. **Hodges, K.E.** and L.S. Mills. 2008. Designing fecal pellet surveys for snowshoe hares. *Forest Ecology and Management* 256: 1918-1926.
 40. **Hodges, K.E.**, L.S. Mills, and K. Murphy. 2009. Determinants of snowshoe hare distribution and abundance in Yellowstone National Park. *Journal of Mammalogy* 90: 870-878.
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 42. **Holmes, N.** 2008 "'How 'Green' is Green Gables: An Ecofeminist Perspective on Nature Imagery. In: L.M. Montgomery." *Storm and Dissonance: L.M.Montgomery and Conflict*. Cambridge Scholars Publishing. 373 – 390.
 43. **Holmes, N.** *Open Wide a Wilderness: Canadian Nature Poems*. 2009. Ed. Nancy Holmes. Introduction by Don McKay. Waterloo: Wilfrid Laurier UP.
 44. Hoodicoff, C., **K.W. Larsen**, and R. Weir. 2009. Home Range Size and Attributes for badgers (*Taxidea taxus jeffersonii*) in south-central British Columbia, Canada. *American Midland Naturalist*. 162(2):305-317.

45. Jain SS, **Murch SJ**, Bird RP, Saxena PK (2009) Optimized St. John's wort (*Hypericum perforatum* L.) germplasm lines exert cytotoxicity in HT-29 colon cancer cells via down regulation of TNF α . *J. Comp. Integ. Med.* (in press).
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49. Karst J, **Jones MD**, Turkington R. 2009. Intraspecific variation in height of lodgepole pine is minimized with increased ectomycorrhizal colonization. *Plant Ecology* 200: 161-5.
50. Karst J, Marczak L, **Jones MD**, Turkington R. 2008. The mutualism-parasitism continuum in ectomycorrhizas: a quantitative assessment using meta-analysis. *Ecology* 89: 1032-1042.
51. **Keyghobadi, N.**, L. A. Crawford, and S. A. Maxwell. 2009. Successful analysis of AFLPs from non-lethally sampled wing tissues in butterflies. *Conservation Genetics*. Online early, doi: 10.1007/s10592-009-9884-2.
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53. **Larsen, K.W.**. 2009. Dispersal in a gradient of habitats: activity by juvenile North American red squirrels (*Tamiasciurus hudsonicus*) in varying-age forest stands. *Ecoscience* 16:75-83.
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55. Lin, Y. and **X. Wei**. 2008. The impact of large-scale forest harvesting on hydrology in the Willow Watershed of Central British Columbia. *Journal of Hydrology*, 359: 141-149.
56. Maxwell, S.A., G. Rasic, and **N. Keyghobadi**. 2009. Characterization of microsatellite loci for the western cherry fruit fly, *Rhagoletis indifferens* (Diptera: Tephritidae). *Molecular Ecology Resources* 9: 1025 - 1028.
57. **Murch SJ**, Ali AR, Cao J, Saxena PK (2009) Melatonin and serotonin in flowers and fruits of *Datura metel* L. *J. Pineal Res.* 47:277-283.
58. **Murch SJ**, Ragone D, Shi WL, Alan AR, Saxena PK (2008) In vitro conservation and sustained production of Breadfruit (*Artocarpus altilis*, Moraceae): Modern technologies for a traditional tropical crop. *Naturwissenschaften.* 95:99-107.
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60. Oaten, D. and **K.W. Larsen**. 2008. Aspen stands as small mammal 'hotspots' within the dry forests of British Columbia. *Northwest Science* 82:276-285.
61. Olson, Mary, Roman Zajac and **Michael Russello**. 'Estuarine-scale genetic variation in the polychaete *Hobsonia florida* in Long Island Sound and relationships to Pleistocene glaciations.' *Biological Bulletin* 217 (2009): 86–94.
62. Parmakelis, Aristeidis , **Michael Russello**, Adalgisa Caccone, C. Marcondes Brisola, J. Costa, O. Forattini, M. Mureb Sallum, Rick Wilkerson and Jeffrey Powell. 'Historical Analysis of a Near Disaster: *Anopheles gambiae* in Brazil'. *American Journal Of Tropical Medicine And Hygiene*. 78.1 (2008): 176 - 178.
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66. Powell JR, Parrent JL, **Hart MM**, **Klironomos JN**, Rillig MC Maherali H. 2009. Phylogenetic trait conservatism and the evolution of functional tradeoffs in arbuscular mycorrhizal fungi. *Proceedings of the Royal Society B: Biological Sciences* 276: 4237-4245.
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71. Roney BR, Renhui L, Banack SA, **Murch SJ**, Honegger R, Cox PA (2009) Consumption of *fa cai Nostoc* soup and potential BMAA exposures in China. *Amyotrophic Lateral Sclerosis*. (in press)
72. **Russello, Michael**, Michael Avery and Timothy Wright. 'Genetic evidence links invasive Monk parakeet populations in the United States to the international pet trade'. *BMC EVOLUTIONARY BIOLOGY*. 8 (2008): 217.
73. **Russello, Michael**, Vinod Saranathan, Susannah Burman, Jessica Eberhard and Adalgisa Caccone. 'Characterization of microsatellite loci in the invasive Monk

- parakeet (*Myiopsitta monachus*)'. *MOLECULAR ECOLOGY NOTES*. 7 (2008): 990 - 992.
74. Sikes BA, Cottenie K, **Klironomos JN** (2009) Plant and fungal identity determines pathogen protection of plant roots by arbuscular mycorrhizas. *Journal of Ecology* 97, 1274-1280.
 75. Steinfartz, Sebastian, Scott Glaberman, Deborah Lanterbecq, **Michael Russello**, Sabrina Rosa, Torrance Hanley, Cruz Marquez, Howard Snell, Heidi Snell, Gabriele Gentile, Giacomo Dell'Olmo, Alessandro Powell and Adalgisa Caccone. 'Progressive colonization and restricted gene flow shape island-dependent population structure in Galápagos marine iguanas (*Amblyrhynchus cristatus*).' *Bmc Evolutionary Biology* (2009): in press.
 76. Swenson, N.G. & **Pither, J.** in press. "Statistical Phylogeography, Ecological Niche Models and Predicting Glacial Refugia: An Examination of Key Assumptions". In: *Phylogeography: Concepts, Intraspecific Patterns and Speciation Processes*. New York, NY: Nova Publishing.
 77. Taylor, G. M., **N. Keyghobadi**, and P. S. Schmidt. 2009. The geography of crushing: variation in claw performance of the invasive crab *Carcinus maenas*. *Journal of Experimental Marine Biology and Ecology* 377: 48 - 53.
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 79. Teste FP, Simard SW, **Durall DM**, Guy R, Berch SM. In Press. Net carbon transfer between *Pseudotsuga menziesii* var. *glauca* seedlings in the field is influenced by soil disturbance. *Journal of Ecology*. *Journal of Ecology*.
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 82. Twieg BD, **Durall DM**, Simard SW, **Jones MD**. 2009. Influence of soil properties on ectomycorrhizal communities in mixed temperate forests. *Mycorrhiza* doi.wiley.com/10.1111/j.1469-8137.2007.02173.x
 83. **Tyson, R.**, S. Haines, and **K.E. Hodges**. Modelling the Canada lynx and snowshoe hare population cycle: the role of specialist predators. *Theoretical Ecology*: in press.
 84. **Walker, Ian** and Marlow G. Pellatt, "Climate change and ecosystem response in the northern Columbia River basin – a palaeoenvironmental perspective". *Environmental Reviews* 16 (2008): 113-140.
 85. **Wei, X.**, G. Sun, S. Liu, H. Jiang, G. Zhou and L. Dai. 2008. The forest-stream relationship in China: a 40-year retrospect. *Journal of American Water Resource Association*, 44(5):1076-1085.
 86. Wheatley, M. and **K.W. Larsen**. 2008. Differential space use inferred from live-trapping versus telemetry: northern flying squirrels and fine spatial grain. *Wildlife Research* 35:425- 433.
 87. Wolfe BE, Parrent JL, Koch AM, Sikes BA, Gardes M, **Klironomos JN** (2009) Spatial heterogeneity in mycorrhizal populations and communities: scales and mechanisms. In *Mycorrhizas – Functional Processes and Ecological Impact*. Edited by C. Azcon-

- Aguilar, J.M. Barea, S. Gianinazzi, V. Gianinazzi-Pearson. Springer-Verlag. Berlin Heidelberg. Chapter 12. Pg. 167- 185.
88. Zhang, L., H. Jiang, X. **Wei**, Q. Zhu, S. Liu, P. Sun and J. Liu. 2008. Evapotranspiration in the meso-scale forested watersheds in Minjiang Valley, West China. *Journal of American Water Resource Association*, 44(5):1154-1163.
89. Zhang, Y.D., S. Liu, X. **Wei**, and J. Liu and G. Zhang. 2008. Evaluation of the impacts of afforestation on potential water yield in the sub-alpine region of southwestern China. *Journal of American Water Resource Association*, 44(5):1144-1153.
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91. Zhou, G., & L. Guan, X. **Wei**, X. Tang, S. Liu, J. Liu, D. Zhang and J. Yan. 2008. Factors influencing leaf litter decomposition: an intersite decomposition experiment across China. *Plant Soil*, 311:61–72.

Media Interviews and News Articles between 2006-present

Dan Durall

2006-08 Interviewed by UBCO TV concerning SARAHS research

2006-08 Provided tours of SARAHS labs to UBC Vancouver/Okanagan recruiting officers

2006-08 Provided tours of SARAHS labs to Research Week tours

2006-08 Provided tours of SARAHS labs to Science Fair students

Bob Lalonde

-Interviewed by Mike Roberts for an "Okanagan Now" segment, on Cicadas in the Valley. - Laboratory research group profiled by the Bulletin of the Entomological Society of Canada.

- Articles in UBC reports and local paper on Mountain Pine Beetle project.

- Interviewed by CHBC about Mountain Pine Beetles in the Valley.

Susan Murch

Print media which has interviewed you or written about your work (please note topic)

The New Yorker (2005) 'ALS/PDC in Guam'

The Best Science Writing 2006 'ALS/PDC in Guam'

Honolulu Advertiser 2006, 'Alzheimer's toxin found in common algae type'

Milwaukee Journal Sentinel 2006, 'Brain toxin found in algae in water'

Honolulu Star Bulletin News, 2006, 'Water-scum toxin linked to nerve ailments'

Victoria Times Colonist, 2006, 'Algae toxin linked to Alzheimer's'

Science News, 2006, 'Many cyanobacteria make a neurotoxin'

The Miami Herald, 2006, 'Botanist researching whether toxin could cause neurological diseases'

Medical News Today, 2006, 'Blue-Green Algal Links to Alzheimer's-Like Neurological Disease'

Journal of the American Medical Association, 2006, 'Environmental Neurotoxin May Pose Health Threat'

Scientific American, 2006, 'Algae Found to Produce Potential Neurotoxin'

Chemical & Engineering News, 2006, 'Neurotoxin made by most cyanobacteria'

The Daily Courier, Thursday, July 5th, 2007, 'UBCO gets big research boost'

Capital News, Friday July 6, 2007, 'UBCO gets \$800,000 in grants'

Trek, Spring 2007, 'Lonesome Pine'

Science News, November 17, 2007, 'Back from the Dead?'

University Affairs, April 2009, Tapping into breadfruit's bounty

UBC Reports, December 2008, Preserving the bounty of breadfruit

Food Navigator USA, December 2008, Nutrition potential of breadfruit explored

The same article appeared in > 30 newspapers / magazines across North America

Newsweek, August 10, 2009 'Breadfruit to the rescue'

HanaHou! August / Sept, 2009, Tree of Plenty: The bounty of breadfruit

Smithsonian, Sept. 2009, Captain Bligh's Cursed Breadfruit

TV and radio programs on which you were interviewed or which highlighted your work (please note topic)

CTV News Net (ALS/PDC in Guam & cyanobacterial blooms in Ontario)

CKCO TV News (Kitchener, Ontario) (Toxins in cyanobacterial blooms)

CBC Toronto (ALS/PDC in Guam)

CBC Kelowna (CRC Chair)

CBC Radio, Tuesday June 5th, 2007, David French (Interviewer), Wollemi Pine.

CHBC News, Opening of the Fipke Centre for Innovative Research (Nov. 2008)
 CBC News, Breadfruit & Food Security (Dec, 2008)
 CBC Victoria, All Points West, Wollemi Pine and Endangered Plant Species (May 28, 2009)

Michael Russello

Broadcast Interviews

Jul 7, 2009 **Les Annees Lumiere**; CBC Radio; Amur tigers on 'genetic brink'

Sep 27, 2008 **The Sean Leslie Show** ; CKNW News (Vancouver); Rediscovery of extinct species of Galápagos tortoise; Interviewed By: Jill

Bennett (guest host)

Sep 26, 2008 **Evening News** ; CTV News; Rediscovery of extinct species of Galápagos tortoise; Interviewed By: Kent Molgat

Sep 26, 2008 **Morning Edition** ; CBC Radio; Rediscovery of extinct species of Galápagos tortoise; Interviewed By: Marion Barschel

Sep 25, 2008 **The Takeaway** ; WNYC New York Public Radio; Biologists are using DNA to bring an extinct tortoise back from the dead;

Interviewed By: John Hockenberry and Adaora Udoji

Jul 4, 2007 **My Science Project** ; UBC Radio (CiTR); Molecular Scatology; Interviewed By: Julia Boughner

May 15, 2007 **Western Australia's Early Morning Program** ; ABC Radio; Lonesome George ; Interviewed By: Wayne Dowsett

May 5, 2007 **Morning Weekend Edition** ; CBC TV News ; Lonesome George; Interviewed By: Marivel Taruc

Selected Text Interviews

July 8, 2009 **Scientific American** ; Rare Siberian tigers face potential genetic bottleneck; Interviewed By: John Platt

July 2, 2009 **BBC News** ; Amur tigers on 'genetic brink'; Interviewed By: Matt Walker

Mar 5, 2009 **Kelowna Daily Courier** ; SARAHS' strategy to save; Interviewed By: Jody Jacobs

Sep 25, 2007 **Canadian Press** ; B.C. scientist part of global group trying to bring back extinct tortoise species; Interviewed By: Camilla Baines

Sep 21, 2008 **The Province** ; Invaders are among us; Interviewed By: Cheryl Chan

Apr 18, 2008 **National Geographic News** ; Captive Tigers Harbor Rare "Purebred" Genes; Interviewed By: Susan Brown

Sep 5, 2007 **Nature** ; Tigers in trouble: Year of the tiger; Interviewed By: Jerry Guo

May 2, 2007 **Canadian Press** ; Research suggests rarest creature on earth may have relatives; Interviewed By: Elianna Lev

May 2, 2007 **The Province** ; UBC prof says Lonesome George has distant relative ; Interviewed By: Lena Sin

May 1, 2007 **Globe and Mail** ; Will Lonesome George find love with an Isabella belle?; Interviewed By: Anne McIroy

Apr 30, 2007 **BBC News** ; DNA search gives hope to tortoise; Interviewed By: Paul Rincon

Apr 30, 2007 **New York Times**; A Lonesome Tortoise, and a Search for a Mate ; Interviewed By: John Tierney

Apr 30, 2007 **Cell Press**; Lonesome George is not alone among Galápagos tortoises; Interviewed By: Erin Doonan

Apr 23, 2007 **New Scientist** ; Galápagos tortoises: untangling the evolutionary threads; Interviewed By: Henry Nicholls

Sep 22, 2006 **Kelowna Capital News**; Bolstering the kokanee run a new challenge; Interviewed By: Jennifer Smith

Jul 6, 2006 **UBC Reports**; Exploring ecology at the molecular level; Interviewed By: Bud Mortenson

Dec 18, 2005 **New Haven Register**; Yale scientists recognize new species of tortoise; Interviewed By: Abram Katz

Nov, 2005 **Natural History Magazine**; You can't tell a tortoise by its cover; Interviewed By: Graciela Flores

Jul 27, 2005 **MSNBC.com**; Darwin's tortoises more diverse than he knew: Scientists have found reptile is not one species but three;

Interviewed By: Robert Britt

APPENDIX B: SARAHS CONSTITUTION (ESTABLISHMENT MARCH 7, 2006)

SARAHS

**Species At Risk and
Habitat Studies**

Irving K. Barber School of Arts
and Science. The University of
British Columbia Okanagan,
Kelowna, BC Canada V1V 1V7

A Proposal To Establish The University of British Columbia Okanagan Centre for Species At Risk and Habitat Studies

Background

This is a proposal for the creation of a Senate-approved, inter-departmental Centre for Species at Risk and Habitat Studies (SARAHS) at the University of British Columbia Okanagan. SARAHS comprises a multidisciplinary group of researchers addressing questions relevant to the structure and function of habitats and populations of species at risk. This research spans multiple levels of organization from the molecular to the landscape. SARAHS researchers address the dynamics of habitats and species across multiple temporal and spatial scales.

Mission

The mission of The SARAHS Centre is to support basic and applied research; to collaborate with and provide relevant information to managers, government, and community organizations; and to train undergraduate and graduate students.

Goals and Objectives

A primary goal of the SARAHS Centre is to gain new knowledge through research on species at risk and on their habitats within which they live. Presently, the Centre consists of 15 UBC Okanagan scientists from a number of departments including Biology, Chemistry, Earth and Environmental Science, Physical Geography, and Mathematics and Statistics. To establish SARAHS within the new third floor of the Science Building, SARAHS was awarded \$2.22 million of infrastructure support by CFI, BC Knowledge Development Fund, UBC and various supply vendors. These funds include \$1.2M for research laboratory space and \$1M for new, multi-user equipment. These funds have allowed us to cluster scientists from six different departments on the third floor of the Science building. This clustering has resulted in a powerful force allowing us to collectively address complex questions concerning the sustainability of species and their habitat.

Collaborations and Partnerships

The interdisciplinary nature of SARAHS allows it to attract a wide diversity of partners, including from collaborators within the University, and from regional, national and international organizations. Presently, we have partnerships with other Universities (Thompson Rivers University), provincial (Ministry of Environment), federal government agencies (Parks Canada, Environment Canada), and regional organizations (South Okanagan Similkameen Conservation Program).

Membership, Governance and Administration

SARAHS membership shall consist of the founding members (Dan Durall, Melanie Jones, Nusha Keyghobadi, Karl Larsen, Bruce Mathieson, Scott Reid, Rebecca Tyson, Ian Walker and Karen Hodges) and a body of interested persons from UBC Okanagan and partner organizations. Membership will be divided into two categories:

- 1) Voting members (founding members and new members added by voting majority).
- 2) Graduate student members. Graduate students supervised by members of SARAHS are automatically eligible for membership. Graduate students of non-member supervisors may apply for membership.

Terms of membership: founding members are without term. All other voting memberships are by application and approval is by a simple voting majority for a three year renewable term.

Membership of the Steering Committee will be selected by voting members of SARAHS and will consist of the director, three UBC Okanagan faculty members, a representative from a partner organization, and a graduate student representative. Steering committee members from UBC Okanagan will be appointed to three-year renewable terms. The partner organization and graduate student representatives will be appointed to two-year terms. The partner membership on the Steering Committee will rotate between the different partner organizations every two years. At least two different UBC Okanagan academic units should be represented on the Steering Committee. The Steering Committee shall meet at least once a year, making recommendations to the voting membership for approval.

SARAHS is overseen by a Director and a Steering Committee. The Director shall be appointed by the Dean of the Irving K. Barber School of Arts and Sciences at UBC Okanagan on the recommendation of the voting membership. The Director is responsible for coordinating the operations of SARAHS, including its administrative staff and budget. The term of the Director's appointment is normally five years, subject to negotiation between the Dean of the Barber School and the appointee. The Director shall chair the Steering Committee.

There will be at least one annual general meeting open to all members of SARAHS. The voting membership of SARAHS will vote to make changes to the SARAHS Constitution; to approve membership applications; to approve the budget and major expenditures; to decide on membership of the Steering Committee; and to address other matters arising. Changes in constitution require a two-thirds majority vote, whereas other matters require a simple majority. A quorum of 50% of voting members plus one will be necessary for a passing vote.

The SARAHS constitution will be approved by Senate in accordance with the UBC Senate policy abstract on the Status of Institutes and Centres, and shall be administered in accordance with UBC policy #87 on Research and Policy #97 on Conflict of Interest and Conflict of Commitment. If the SARAHS constitution and university policy differ, university policy shall prevail. The SARAHS centre is housed within the Irving K. Barber School of Arts and Sciences at the University of British Columbia Okanagan.

The Centre will manage a Fragment Analysis and DNA Sequencing Service (FADSS). In addition to Fragment analysis and DNA sequencing services, it will provide DNA preparation services to SARAHS founding members and to external customers. The SARAHS Director is responsible for hiring and supervising technical support and for administering FADSS revenues and expenditures. FADSS will have a pricing scale in place. Pricing will be based on four categories (listed in the order of the degree of discount): 1) SARAHS founding members; 2) UBC Okanagan faculty; 3) non-UBC Okanagan academics (researchers paying for services who are not affiliated with projects/grants of UBC Okanagan faculty); and 4) private sector. Founding members collaborating on projects that are not SARAHS related, and for which they are not Principal Investigators on the grant, will pay the UBC Okanagan rate. Prices are subject to adjustment by the approval of the Steering Committee. Overhead will not be collected from FADSS revenues generated from non-private sector users (SARAHS founding members, UBC Okanagan faculty and non-UBC Okanagan academics): their fees will go towards the FADSS operations, maintenance of equipment, salary for technicians, amortization of equipment (saving money for the eventual replacement or maintenance of equipment). Revenue above these expenditures will be used with the advice of the steering committee and the approval of the voting membership. Twenty-five percent overhead will be charged on all private sector revenue. Based on UBC policy, this overhead will be divided among the University-Industry Liaison Office (UILO), the President's Office, and the Deans Office. SARAHS will negotiate with the Dean to have a portion of the overhead go to funding SARAHS related activities.

Budgetary Implications

SARAHS will be established using no UBC General Purpose Operating Funds. Instead, operating funds will be raised from, personal operating grants, DNA sequencing services and from external donors. These funds will cover the operating expenses. A technician is presently funded by a CFI Infrastructure Operating Fund to maintain operate equipment purchased through CFI and BCKDF funding.

Student Training

SARAHS will establish a unique interdisciplinary training environment that will be critical to understanding species at risk and their habitat. Students and other trainees will be enrolled in established UBC Okanagan Departmental graduate or training programs. However, as an interdisciplinary research centre, SARAHS will enrich these training programs with a truly integrative approach taking advantage of our diversity of knowledge in our faculty and staff and will provide state of the art facilities whereby this collaborative approach will excel.

Summary

The experimental resources provided by SARAHS and its partners, and the increased collaborative interactions that these resources have begun to promote, will lead to a wide variety of solutions to our decline in species and their habitat. The SARAHS Centre will make a valuable and lasting contribution to the research community at UBC Okanagan as an official University Centre.

APPENDIX C: SHARED VISION OF SARAHS IN 2014

- Engage local and regional stakeholders in SARAHS research
- Maintain a strong base of engaged community partners, including those from the Aboriginal community
- Generate national headlines and an international research profile
- Fulfill a research advisory role for guiding policy and decision-making
- Develop and maintain a nationally and internationally recognized student training program for domestic, international and First Nations students
- Host the 2013 conference of the Canadian Society of Ecology and Evolution
- Develop and host workshops/modular courses on a regular basis
- Organize symposia/special issue of a journal
- Support regular visiting scholars (or interdisciplinary groups of scholars that contribute to training program)
- Establish sustained funding streams
- Work to develop a CFI-funded cryofacility and museum for Canadian species at-risk of extinction
- Achieve adequate administrative and technical support
- Acquire additional infrastructure
- Integrate research and teaching (ex. white paper seminars)

THE UNIVERSITY OF BRITISH COLUMBIA | OKANAGAN



OKANAGAN SENATE SECRETARIAT Enrolment Services Senate and Curriculum Services

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3333 University Way
Kelowna, BC · V1V 1V7
Tel: (250) 807-9259 · Fax: (250) 807-8007
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September 22, 2010

To: Okanagan Senate

From: Nominating Committee

Subject: Senator Committee Appointments (approval)

That the following standing committee appointments be made, effective until August 31, 2011 and thereafter until successors are appointed:

Committee	Faculty Placement
Academic Building and Resources ¹	Dr. Phil Balcaen (Education)
Academic Policy	Dean Daniel Muzyka (Management)
Admissions and Awards	Dean Mary Courtney (Health and Social Development)
Curriculum	Acting Dean Kenneth Phillips (Creative and Critical Studies)
Learning and Research	Dean Lynn Bosetti (Education)

That the following standing committee appointments be made, effective until March 31, 2011 and thereafter until successors are appointed:

Committee	Student Placement
Academic Building and Resources	Ms. Maria Woodward (Management)
Appeals of Standing and Discipline	Ms. Maria Woodward (Management) Mr. Cecil Norman

For the Committee,
Dr. Mercedes Duran-Cogan
Chair, Nominating Committee

¹ The membership of this committee is the same as the membership of the Okanagan Sub-Committee of the Budget Committee of the Council of Senates.

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September 22, 2010

To: Okanagan Senate

From: Nominating Committee

Subject: Appointment to the President's Advisory Committee to Consider an Extension of the Appointment of the Vice-President, Research & International (approval)

The President is convening an advisory committee to consider an extension of the appointment of the Vice-President, Research & International. The current incumbent, Dr. John Hepburn has agreed to stand if appointed. The composition of that Committee includes one person selected by and from the Okanagan Senate, as recommended by the Nominating Committee. The proposed Policy #24 can be viewed at: (http://www.universitycounsel.ubc.ca/news/policy24_060910.pdf).

Dr. Marvin Krank has agreed to let his name stand for appointment to the President's Advisory Committee to Consider an Extension of the Appointment of the Vice-President, Research & International.

The Nominating Committee is pleased to recommend the following:

Motion: *That Senate appoint Dr. Marvin Krank as the Okanagan Senate Representative on the President's Advisory Committee to Consider an Extension of the Appointment of the Vice-President, Research & International.*

For the Committee,
Dr. Mercedes Duran-Cogan
Chair, Nominating Committee