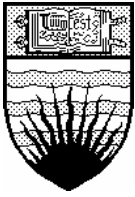


# THE UNIVERSITY OF BRITISH COLUMBIA

ITEM 09b



December 13, 2006

**OFFICE OF THE DEPUTY VICE-CHANCELLOR AND  
VICE-PRESIDENT, ACADEMIC AND RESEARCH**  
3333 University Way  
Kelowna, BC V1V 1V7  
Tel: 250 807-9224

To: Okanagan Senate

From: Dr. Doug Oworm, Deputy Vice-Chancellor

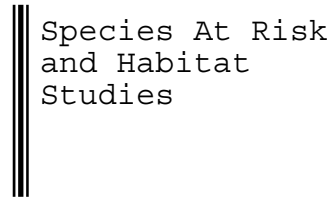
**Re: SARAHS Centre**

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I am pleased to endorse and present for your information a proposal to establish a **“University of British Columbia Okanagan Centre for Species At Risk and Habitat Studies” (SARAHS)** in the Irving K. Barber School of Arts and Sciences.

This new Centre will support basic and applied research in the areas of species at risk and habitat studies. As a collaborative and interdisciplinary endeavour, SARAHS will be uniquely positioned to address complex questions concerning the sustainability of species and their habitat.

# SARAHS



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 an inter-departmental Centre for Species at Risk and Habitat Studies (SARAHS) at the University of British Columbia Okanagan. The creation of this Centre has been submitted to the Senate for information. SARAHS comprises a multidisciplinary group of researchers addressing questions relevant to 1) the structure and function of habitats and 2) populations of species at risk.

### Mission

The mission of The SARAHS Centre is to support basic and applied research in the areas of species at risk and habitat studies. The research spans multiple levels of organization from molecules to landscapes. SARAHS' researchers address the dynamics of habitats and species across temporal and spatial scales. In addition, SARAHS members will 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 the habitats in which they live. Presently,

the Centre comprises scientists from a number of disciplines including Biology, Chemistry, Earth and Environmental Sciences, Physical Geography, Mathematics, and Statistics. To establish SARAHS on the new third floor of the Science Building, \$2.22 million of infrastructure support was acquired from 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 disciplines and three academic units 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 collaborators from other Universities, as well as from regional, national and international organizations. Presently, we have partnerships with other Universities, provincial and federal government agencies and regional organizations.

## Membership, Governance and Administration

SARAHS membership shall consist of researchers actively conducting research on species at risk and habitats. Members shall include researchers from UBC Okanagan, partner organizations and founding members (Dan Durall, Melanie Jones, Nusha Keyghobadi, Karl Larsen, Bruce Mathieson, Scott Reid, Rebecca Tyson, Ian Walker and Karen Hodges). 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 members. Graduate students of non-member supervisors may apply for membership.

*Terms of membership*

Voting memberships are by application and approval is by a simple voting majority for a three-year renewable term. Normally, founding members are without term. Current (August 2006) voting members are as follows:

Dan Durall (SARAHS Director)	SCI 377	daniel.durall@ubc.ca	250 807-8759	disturbance and ectomycorrhizal fungi, below- ground carbon dynamics
Bob Lalonde	SCI 383	bob.lalonde@ubc.ca	250-807-8764	Population Ecology
Bruce Mathieson	SCI 378	bruce.mathieson@ubc.ca	250 807-8760	Neurobiology of vertebrate behaviour, environmental toxins
Ian Walker	SCI 161	ian.walker@ubc.ca	250 807-9559	Limnology, paleoecology, chironomids as indicators of Quaternary climate change
Karen Hodges (CRC chair in Conservation Biology)	SCI 382	karen.hodges@ubc.ca	250 807-8763	fragmentation, conservation of peripheral populations, population cycles
Karl Larsen	*TRU	klarsen@tru.ca	250-828-5456	Conservation Biology
Mary Forrest	SCI 160	mary.forrest@ubc.ca		Genetics of mycorrhizal fungi
Melanie Jones (Associate Dean of Irving K. Barber School of Arts and Science)	SCI 200A	melanie.jones@ubc.ca	250 807-9553	physiology of ectomycorrhizas and roots of woody plants, fire effects on mycorrhizae
Mike Pidwirny	SCI 376	michael.pidwirny@ubc.ca	250-807-8758	GIS models of landscape change, biogeography

Nusha Keyghobadi	*UWO	nkeyghob@uwo.ca	519-661-2111 ext.80470	spatial patterns and population genetics of insects
Paul Shipley	SCI 307	paul.shipley@ubc.ca	250-807-8749	Microbial Biochemistry
Rebecca Tyson	SCI 386	rebecca.tyson@ubc.ca	250 807-8766	Mathematical and spatial modelling
Scott Reid	SCI 379	scott.reid@ubc.ca	250 807-8761	Physiology of fish in response to environmental stressors
Sylvia Esterby	SCI 111	sylvia.esterby@ubc.ca	250-807-9536	Biostatistics
Sylvie Desjardins	SCI 387	<u>sylvie.desjardins@ubc.ca</u>	250-807-8767	Mathematical and spatial modelling
Xiaohua (Adam) Wei (FRBC Chair in Watershed Management)	SCI 309	adam.wei@ubc.ca	250-807-8750	habitat models, GIS, remote sensing

\*TRU: Thompson River University; UWO: University of Western Ontario

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, in consultation with the membership, 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. The Director shall have a reduced teaching load, alternating between a 2-1 and a 1-1 assignment during a 2 year period.

Membership of the Steering Committee will be selected by voting members of SARAHs and will consist of 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 to a different partner organization 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.

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 matters arising. Changes in the constitution require a two-thirds majority vote, whereas other matters require a simple majority. A quorum will comprise 50% of voting members, and a list of active voting members will be maintained by the Director.

SARAHS will 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/government agencies (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. Discounts for high volume users will be considered and approved by the director in consultation with the membership. 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 maintenance and the eventual replacement 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

In general, SARAHS will be established using no UBC General Purpose Operating Funds, however, the Director shall have a reduced teaching load, alternating between a 2-1 and a 1-1 assignment during a 2 year period. 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 habitats. Students and other trainees will be enrolled in established undergraduate, 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. To promote this, SARAHS will organize a weekly seminar series during the school terms, whereby students will be encouraged to participate.

## 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 the current decline in species and their habitats. The SARAHS Centre will make a valuable and lasting contribution to the research community at UBC Okanagan as an official Centre within the Irving K. Barber School of Arts & Sciences.