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## Application for a Grant

<b>Identification</b>					
This page will be made available to selection committee members and external assessors.					
Funding opportunity <b>Insight Grants</b>					
Joint or special initiative					
Application title <b>Apachean Origins: New Explorations of the Canadian Heritage of A. D. 13th Century Dene at Promontory Point, Utah</b>					
Applicant family name <b>IVES</b>			Applicant given name <b>John</b>		Initials <b>W.</b>
Org. code <b>1480111</b>	Full name of applicant's organization and department <b>University of Alberta Anthropology</b>				
Org. code <b>1480111</b>	Full name of administrative organization and department <b>University of Alberta Anthropology</b>				
Scholar type			Regular <input type="radio"/>	New <input checked="" type="radio"/>	Research Group
If New, specify category			1 <input type="radio"/>	2 <input checked="" type="radio"/>	3 <input type="radio"/> 4 <input type="radio"/> <b>435-2</b>
Does your proposal require a multidisciplinary evaluation?					Yes <input type="radio"/> No <input checked="" type="radio"/>
Does your proposal involve human beings as research subjects? If "Yes", consult the <i>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans</i> and submit your proposal to your organization's Research Ethics Board.					Yes <input checked="" type="radio"/> No <input type="radio"/>
Does your proposal involve activity that requires a permit, licence, or approval under any federal statute; or physical interaction with the environment? If 'Yes', complete Appendices A and B.					Yes <input checked="" type="radio"/> No <input type="radio"/>
	Year 1	Year 2	Year 3	Year 4	Year 5 Total
Total funds requested from SSHRC (from page 9)	<u>73,866</u>	<u>56,616</u>	<u>36,541</u>	<u>17,262</u>	<u>0</u> <u>184,285</u>

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## Participants

List names of your team members (co-applicants and collaborators) who will take part in the intellectual direction of the research. Do not include assistants, students or consultants.

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Role

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Collaborator ☐

Family name

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Initials

Org. code

Full organization name

Department/Division name

Role

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Collaborator ☐

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## Research Activity

The information provided in this section refers to your research proposal.

### Keywords

List keywords that best describe your proposed research or research activity. Separate keywords with a semicolon.

Apachean Migration; AMS Dating; Ancient DNA; Perishable Artifacts, Promontory Caves

### Priority Areas - Priority area(s) most relevant to your proposal.

### Disciplines - Indicate and rank up to 3 disciplines that best correspond to your activity.

Rank	Code	Discipline	If "Other", specify
1	60400	Archaeology	
2	60200	Anthropology	
3	62400	Linguistics	

### Areas of Research

Indicate and rank up to 3 areas of research related to your proposal.

Rank	Code	Area
1	240	Indigenous peoples
2	100	Arts and culture
3	340	Population studies

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your proposal.

From	To
<p>Year</p> <p>10000</p> <p>BC AD</p> <p><input checked="" type="radio"/> <input type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>1500</p> <p>BC AD</p> <p><input type="radio"/> <input checked="" type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>

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## Research Activity (cont'd)

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2	1130	Western Canada
3	1140	Northern Canada

### Countries

If applicable, indicate and rank up to 5 countries covered by or related to your proposal. Duplicate entries are not permitted.

Rank	Code	Country	Prov./ State
1	1200	UNITED STATES	UT
2	1100	CANADA	AB
3	1100	CANADA	YT
4	1100	CANADA	NT
5	1100	CANADA	SK

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## Response to Previous Critiques - maximum one page

Applicants may, if they wish, address criticisms and suggestions offered by adjudication committees and external assessors who have reviewed previous applications.

The proposed research focuses on Apachean migration as a significant vector of Dene expansion in western North America. Many archaeological models simply treat migration processes as the outcome of biological fissioning of human populations, often conceiving of migration as a wave-of-advance (e.g., Steele 2009). The same kin-structured processes that guided Dene principles of group formation in the Subarctic would shape different fissioning processes, creating alternative migratory processes (such as "leapfrog" or "outpost" models that resonate with Promontory evidence). Renewed archaeological thinking about migration pays attention to social science research into migration, and specific processes like kin structuring of founding populations (Anthony 1990; 2007). The current proposal develops predictions about what to expect during Apachean migration and uses the extraordinary fidelity of Promontory material culture and the growing inventory of AMS dates reflecting temporal trends to frame precise questions. These include insights into the population structure of the Promontory Cave inhabitants (derived from moccasin sizes and their precise relationship to stature and age), assessing the potential for apex founding populations (based on refinement of moccasin sewing techniques) and similar problems.

My long term research interests involve theoretical models of kinship in hunter-gatherer societies. Eggan (1980) suggested a fruitful research path in saying "there is a whole world of social structures 'underneath' Claude Levi-Strauss' Elementary Structures of Kinship." Kinship is normally the idiom in which principles of group formation are expressed in band societies. Different group forming principles trigger varied developmental processes at intergenerational time scales. Developmental processes inflected by relative endogamy or exogamy have demographic impacts on polity and economy, shaping the archaeological record. This was demonstrated for the Dene language family (Ives 1990; 1998; 2010). My approach contrasts with ecological evolutionary models that see band societies as invariant, with feedback processes returning local groups to optimal states. External reviewers of my previous proposal (funded at 31% of the requested value for a single year) ranked the proposal as excellent in all categories, but the review committee asked for more theoretical framework and details of graduate student involvement. Both concerns are addressed here.

The project outlined here defines specific roles for two graduate students. A. Reilly will investigate tabular endscrapers (chi-thos, but specifically those used as implements for softening leather) and related hide processing tools, their continued ethnographic use today, their archaeological distribution in western Canada, and the interplay between hide working implements and leather products, where abundant fur, parts of bison robes and even the marks of fleshing tools on hide give remarkable glimpses into the intense hide production in the caves. MA research G. Yanicki is completing focuses on gaming and prehistoric societal interaction; he will begin his PhD program in Anthropology at the University of Alberta in January 2012 to explore Promontory-Fremont interaction through gaming and other measures with existing Utah collections as well as new excavations at Fremont pithouses discovered during our April 2011 work near the Promontory caves. The pithouses yielded both Promontory and Fremont pottery. T. Kristensen's research on NWT base camps from which prehistoric Dene people used alpine ice patches (leaving perishable artifacts) is expected to yield synergies with the Promontory work. Additional research foci are defined for students that will be accepted during the proposed research.

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## Summary of Proposed Research

The summary of your research proposal should indicate clearly the problem or issue to be addressed, the potential contribution of the research both in terms of the advancement of knowledge and of the wider social benefit, etc.

The departure of Navajo and Apache ancestors from Subarctic Canada ca. 1200 years ago formed one of two key vectors in migrations through which Dene or Athapaskan speakers became the most widespread of the language families in North America. Dene communities extend from Alaska to the Sierra Madres, yet relatively little is known archaeologically about what is clearly an important story in New World prehistory. This research explores a key facet of the Apachean expansion through renewed examination of the Promontory Caves on Great Salt Lake, Utah. These dry caves were first excavated in 1930 by prominent 20th century anthropologist Julian Steward, who found every manner of perishable item had been preserved, including hundreds of moccasins, mittens, feathers, cordage and basketry.

Initial Promontory research has been supported by SSHRC SRG-1A 410-2010-0480, which provided partial funding for studies that exceeded our already high expectations. We expanded our previous AMS sample to 45 dates (showing conclusively the Promontory Phase occupation of Caves 1 and 2 is tightly focused on the interval from AD 1150-1300) and began studies to recover ancient human DNA from Promontory moccasins. Initial funding also allowed us to undertake collections analysis in which we explored details of the population structure of the cave inhabitants. Critically, in April 2011 we began new excavations affirming that Cave 1 has a sudden Promontory Phase occupation and that Steward had left behind a large area of even thicker, intact deposits yielding the same amazing range of perishables. More lightly occupied Cave 2 has rich Promontory Phase deposits, but reveals a long stratigraphic sequence extending to the mid-Holocene (and likely to the era just after the retreat of Lake Bonneville). We are here seeking more comprehensive funding to carry out elements of the original proposal that were not funded, and to expand the proven research potential of the Promontory sites and collections.

Because the Promontory record preserves a broad range of material culture, it is well suited to explorations of cultural identity. Steward concluded that this archaeological record was likely created by Apachean ancestors who had formerly been northern bison hunters. He did not have the advantage of several more decades of research concerning Subarctic, Northern Plains, and Great Basin prehistory in which there are many indications that Apachean ancestors retained some northern heritage, but rapidly assimilated ceremonial and material culture from neighbouring societies.

This research is providing for a uniquely North American interdisciplinary project, unprecedented in uniting regional specialists who do not ordinarily work together. The project retains two components: 1) to ensure that maximal information is recovered through re-analysis of Promontory collections from Steward's work, and 2) to continue strategic excavations in Promontory Caves 1 and 2. We will continue building a high precision AMS radiocarbon record through which we can explore specific questions about migratory processes, the timing and nature of the cave occupations, and the likelihood that Apachean ancestors inhabited the caves.

Additional SSHRC funding is required to involve First Nations artisans who will provide expertise in assessing the manufacturing details of the Promontory clothing as well as hide production and sewing tools, some of which continue in use in Dene communities today. This research will also speak directly to emerging international interest in shared cultural and language identities being expressed by Dene communities in Canada and the U. S. The dramatic nature of the artifacts is equally evocative for wider public audiences.



## 1. OBJECTIVES

The research proposed here will expand upon work partially funded under SSHRC SRG-1A 410-2010-0480 Iv, *Apachean Origins: Exploring the Canadian Heritage of A. D. 13th Century Dene at Promontory Point, Utah*. Our objectives remain substantially the same—to make a contextual approach to the processes connected with Apachean ethnogenesis, applying an interdisciplinary strategy to explore the emergence of Navajo and Apache cultural identities from Subarctic and Northern Plains antecedents in Canada (cf. Trigger 2006:513-14). This work focuses on the astonishing array of perishable artifacts excavated by Julian Steward at the Promontory Caves on Great Salt Lake, Utah. Our expectations for work arising from the original proposal were high; the results we have obtained through initial SSHRC funding have exceeded those expectations. In seeking additional funding, we plan to:

- 1) Finish assembling a high precision AMS dating record for the 13<sup>th</sup> century occupations of Promontory Caves 1 and 2, suitable for testing specific hypotheses about the rapid onset of their occupation, to reveal migratory processes used by Apachean ancestors;
- 2) Finish strategic archaeological work at the Promontory Caves so that remaining Promontory Phase deposits and cave environs can be assessed with cutting edge standards, and left in stable condition;
- 3) Continue comprehensive assessment of the Promontory collections for evidence that they were created by peoples with the Subarctic and Northern Plains heritages expected for Apachean ancestors;
- 4) Address unfunded needs to convene First Nations and Native American experts in manufacture and use of the kinds of artifacts in the Promontory Caves (particularly the clothing like moccasins), so that they can evaluate these artifacts and provide traditional insights into this extraordinary assemblage;

## 2. CONTEXT

As analytical methods have become increasingly refined, and as history has come once again to matter in Americanist archaeology, a new generation of scholars is turning to approaches that may be termed “historical anthropology”—recovering and writing the deep history of pre-contact societies by integrating methods and data from anthropology’s subdisciplines and other disciplines (Kirch and Green 2001; Pauketat 2001; Eiselt 2006, in prep.; Ortman 2009; Wilson 2011). We wish to make a comprehensive exploration of a significant migration event in one branch of the Dene language family, the Apachean speakers. Linguists consistently conclude that the proto-Dene homeland lay in northwestern North America and that there were two major vectors of expansion in the last two millennia, one leading to the Pacific Coast and one leading to the Canadian-Apachean Dene speakers (e.g., Krauss and Golla 1981; Foster 1996). Recent genetic research has reinforced these broad trends (Malhi et al. 2003; Malhi et al. 2008). Archaeological research might contribute pivotal evidence to this picture, particularly with respect to timing and pathways, but archaeological literature for the Dene phenomenon is refractory. Dene speakers are highly conservative in retaining their languages. Yet, they readily adopt material and ceremonial culture from neighbouring peoples, making archaeological traces of Dene people difficult to distinguish.

There have been intensive efforts to discriminate Dene archaeological records under these challenging circumstances (e.g., Matson and Magne 2007), but often, rather simple tactics are applied to identify past Dene populations. Such efforts establish tenuous linkages between individual artifact styles (such as microblades or Kavik points) and Dene groups, or larger archaeological phases or complexes such as Besant or Avonlea (e.g., Kehoe 1966; Perry 1980; Wilcox 1981; Wilmeth 1979; Magne and Fedje 2007). Consequently, there are divergent conclusions concerning when, where, and how Dene ancestors left the Subarctic, and long temporal and geographic gaps between Canada and 16th century sites such as LA55979, the earliest Navajo site in New Mexico (Warburton and Begay 2005).

This research builds upon previous work involving theoretical models of kinship in hunter-gatherer societies (Ives 1990; 1998; 2010). As Eggan (1980) and Asch (1988) showed, Levi-Strauss (1969) neglected a world of elementary kinship structures pertinent to band societies, where kinship is the idiom in which principles of group formation are expressed. In the Dene case, when Dravidian kin

principles are applied to like versus unlike sex sibling cores at the heart of bands, the intergenerational trajectory of these bands is greatly affected by the tendencies toward either exogamy or endogamy that result. Principles of group formation favouring endogamy lead to bands that meet political and economic needs through growth. When these bands are successful, they can become as large as regional marriage isolates (ca. 250 persons). Bands favouring co-resident exogamy maintain smaller sizes, making use of a more extensive web of external alliances that flow from exogamous marriages. These demographic impacts on polity and economy shape the archaeological record. Dene prehistory can be viewed as an unfolding of variations upon an originally Dravidian kin theme, where the semantic structure of a kin terminology serves as a reliable index of group forming principles. In the case at hand, we know the proto-Apachean kin terminology featured Dravidian crossness where endogamous marriage could occur (Dyen and Aberle 1974; Ives et al. 2010). Such populations are prone to growth and fissioning. These principles must have changed during Apachean migration as most daughter kin systems shifted toward exogamy.

This earlier research intersects with insights arising from the renaissance in the anthropological treatment of migration (e.g., Brettell and Hollifield 2008; Cabana and Clark 2011). Anthony (1990; 2007) synthesized extensive social science literature on migration, developing ideas that resonate well with Apachean migration. He stressed that migrations are not events but rather processes that are kin-structured. While larger populations may move through a “wave-of-advance,” the small founding populations that almost certainly characterized Proto-Apachean would be far more likely to engage in a “leap-frog” pattern, in which scouting behavior in advance of residential shifts would be expected. Migration in this mode creates “islands” of settlement, takes place along well-defined routes, and has the capacity to carry regionally defined artifact types to a destination, leading to “founder effects” in both artifact styles and the raw materials. The kin-structuring of migration involves “streaming” of relatives toward established migrants, where earlier migrants become “apex” families in the new setting; initial populations may have an imbalance of younger males that is redressed as more women enter the population nucleus that takes shape. Thinking in this way leads to a variety of testable propositions about Apachean migration more illuminating than assigning phase, complex or artifact labels.

The dry Promontory Caves 1 and 2 that Steward excavated in 1930-31 had abundant bison bones, hair, horn, and hide and hunting paraphernalia. Intensive hide preparation and sewing activities took place, part of a broad range of domestic activities. Most spectacularly, Steward recovered 250 moccasins (mainly of bison leather and fur). Steward concluded that these artifacts had been left behind by a northern hunting population, most likely Apacheans. These materials attracted little subsequent notice, Gunnerson (1956) and Aikens (1967) being exceptions. A strong culture history focus on *in situ* Great Basin development and then, ironically, Steward’s own influence through cultural ecology relegated this divergent assemblage to a curiosity termed the “Promontory Problem” (Forsyth 1986; Ives, in prep.).

There is highly plausible linguistic and genetic evidence that the proto-Apachean population came from east of the Rocky Mountains and that early Apachean ancestors lived in a small, cohesive speech community that had been the subject of genetic bottlenecks (Malhi et al. 200, 2008; Golla 2008, Ives 2010). With Sapir (1936), we believe that Apachean ancestors left the Subarctic to become pedestrian Plains bison hunters, interacting first with southern (but not Puebloan) populations, and then with Southwestern and southern Plains societies. As part of the transformative nature of migration, we therefore expect them to have retained some Subarctic and Plains material culture, and to have begun assimilating the material culture of their neighbours. Archaeological and ethnological research shows that the Promontory Cave 1 and 2 assemblages contain moccasins in Bata Shoe Museum styles 2(Ab) and 2(Bb), characteristic of Dene and Algonquian speakers of the Canadian Subarctic (Thompson 1990). An antecedent (1400 BP) round-toed moccasin has been discovered in the Yukon ice patches, within the region generally thought to be the proto-Athapaskan homeland (Hare et al. 2004). Other Promontory artifacts, most notably *chi-thos* and a piece of fabric atypical of the Great Basin but woven exactly as

northern Dene hunting bags were, further elaborate the northern heritage Steward commented on. Our AMS dates on Promontory artifacts are tightly clustered in the interval between AD 1200-1300. Initial Bayesian statistical analysis reveals a pattern in which “northern” artifacts (the moccasins and the fabric) overlap in age with “southern” or Fremont artifacts (such as “one-rod-and-bundle” basketry or juniper bark pottery rings), but the northern group precedes the southern group. Thus, the situation Steward encountered bears strong resemblances to an island of migratory settlement, at a time and place where Apachean ancestors are very much expected to be nearby. Our preliminary results further suggest that a population with northern antecedents arrived suddenly on Promontory Point (the larger Promontory Cave 1 had never been occupied before), and began taking up Fremont material culture. These events took place as a severe drought beginning in AD 1276 brought about the end of Fremont, with the Promontory Phase persisting in the Great Salt Lake and Utah Valley regions for another two centuries (Janetski and Smith 2007; Benson *et al.* 2007).

The Promontory Cave assemblages are one of the most extraordinary aspects of the late prehistoric period in all of western North America; they can shed light on one of the most remarkable episodes in New World Prehistory, the Apachean departure from Subarctic Canada, with insights seldom available the archaeological record.

### 3.0 METHODOLOGY

We propose continued research with closely linked, interdisciplinary strategies intended to derive a maximum degree of information from valuable existing collections and renewed excavations we have been allowed to undertake in Promontory Caves 1 and 2.

**3.1 AMS Dating:** Our previous research and recent SSHRC funds were used in creation of a statistically robust sample of Accelerator Mass Spectrometry (AMS) ages from perishable artifacts, to allow more sophisticated hypothesis testing. The Utah Museum of Natural History (UMNH) and the U. S. Department of the Interior approved an additional 47 samples taken in August of 2010. Our AMS work is taking place at the world’s leading facility, the Laboratory for Archaeology and the History of Art, University of Oxford. Twenty-two new samples (mainly moccasins, but a bow, the hoop and darts from a game, etc.) were carefully pretreated to ensure that previous conservation methods did not impact the validity of the dates. Our project now has 39 perishable dates tightly bracketed at 680-830 BP.

We wish to bring this already significant program to fruition, and seek funding for an additional 40 radiocarbon ages to resolve four key areas of enquiry: 1) the temporal relationship between artifacts atypical of the region (with northern affinities) and those typical of the region (of southern origin); 2) discrimination of temporal trends in the population structure of Promontory Cave inhabitants; 3) discrimination of temporal trends in the skill level and elaborateness of decoration revealed in the Promontory moccasins; 4) accurate assessment of ages from well controlled excavation contexts. Initial Bayesian modeling suggested that the atypical artifacts overlap in time with but tend to predate regionally typical artifacts, consistent with arrival of northern hunters at Promontory Point who then take up surrounding material culture. We are currently completing new Bayesian modeling with this larger sample of dates. If the same pattern holds, that finding would be consistent with arrival of migrating Apacheans at Promontory Point in the 12-13<sup>th</sup> century.

For points 2) and 3), the Promontory collections provide a unique opportunity to assess temporal trends in the populations that suddenly appear in Caves 1 and 2. In research to be reported shortly, Billinger and Ives use anthropometric data to predict foot size from moccasin size. Foot size is an accurate predictor of stature, and stature can be used to predict age. Promontory age structure as reflected in moccasins is dominated by children and subadults, though large adult males are present. With the enhanced AMS sample requested here, we will be able to determine if this age structure shifted through time. Similarly, we will apply measures for assessing the sophistication of moccasin manufacture and decoration (e.g., number of stitches per cm; presence of quillwork). With larger sample sizes for AMS dates, we would expect to be able to detect the presence or absence of temporal trends in

moccasin making. These data are integrally linked to the theoretical framework underlying our approach. If principles of group formation trigger variant development processes, and Dene migration was kin-structured as other migration is, we expect predictable relationships for factors such as the size and composition of fissioning groups in the migration process to be connected with phenomena known from broader social science research on migration. Scouting, a tactic well known to Apachean populations (e.g., Zolbrod 1984), could mean that parties of young adult males typified the earliest cave inhabitants; we might expect more rudimentary moccasin construction and repair as well as larger moccasins in early deposits. Alternatively, the initial migratory population could have been quite diverse in its age and sex structure, bringing group members with a range of skills, some with greater capacity to invest time in additional decoration. The latter individuals could be part of “apex” families, known in migration literature for their influential role in migrating populations. If a broad degree of variability in skill and decoration existed from the first deposits, this would suggest the Cave populations arrived with larger and more complex age structures. The potential to make such distinctions almost never exists for archaeological records. An enhanced AMS sample for Promontory materials will provide a magnificent opportunity to test refined hypotheses about prehistoric migration processes.

A dramatic revelation of the April 2011 excavations was that Steward’s 50-60 cm thick Promontory Phase layer was not homogenous. It was nearly twice thick toward the front of the cave (> 90 cm), and had internal structure composed of fibrous anthropogenic bands separated by mineral deposits. There appear to be 8-10 of these bands; given our reasonable grounds for suspecting that the peak Promontory Phase occupation occurred over 150 years or less, it may be possible to work with fine segments of time in the Promontory layers, with potential resolution approaching the level of a decade. A rigorous program of dating for these individual strata would clearly have extraordinary analytical value in determining the onset and end of the Promontory Phase, and in assessing internal pulses of occupation.

**3.2 Renewed Archaeological Work at Promontory Caves 1 and 2:** During an April 2010 visit, we were able to assess excavation prospects for both caves and to secure permission to excavate from landowner Mr. George Chournos. Our April 2011 excavations involved a 1 x 2 m unit near the front of Cave 1. We discovered rich, intact Promontory Phase deposits yielding moccasins, feathers, quills, massive quantities of fur, remnant strips of staked bison robes, abundant bison and antelope bones, and many other extraordinary finds. Because these deposits were thicker than expected, we could not complete this unit. Cave 2 has Promontory Phase deposits, but there are underlying occupations (some with hearths) extending to the mid-Holocene. At a depth exceeding three meters, we encountered an obsidian macroblade lying just above Lake Bonneville sediments. It is clear that Cave 2 has a lengthy occupation sequence. Both caves have rare and fragile deposits of international significance; we seek additional funding to ensure that these units are completed and properly stabilized, and to undertake further strategic sampling of these deposits to aid in their future management.

Our field camp, situated roughly 3 km from the caves, had several apparent pithouse depressions yielding surface finds of Fremont and Promontory pottery. This site can illuminate the relationship between the Promontory Cave occupants and Fremont peoples; we are seeking funding for a graduate student dissertation project (Yanicki) that would involve trenching three of the pithouses to determine their stratigraphy and recover artifact samples, as well as surface survey and limited subsurface testing in the cave environs to determine what activities took place outside the caves at satellite sites.

Janetski arranged for laser mapping of Caves 1 (1.1 million points) and 2 (300,000 points) during April 2011 fieldwork. These data allow for detailed 3D imagery of the caves. Supernant and Ives will oversee graduate student efforts to use this data to extrapolate habitable surface space, volume of deposits and proportional density of artifacts such as moccasins (e.g., allowing estimates of the total number of moccasins once present in the caves, mean annual deposition of moccasins, etc.) and other information pertinent to refined hypothesis testing of occupation dynamics.

**3.2.1 Zooarchaeological and Botanical Investigations:** Steward removed only a small sample of faunal remains. Janetski's MA student L. Johansson has analyzed these materials; she is now analyzing faunal remains from our April 2011 excavations in the Promontory Phase layers of Cave 1, and a more diverse fauna from the broader time range reflected in Cave 2. The Cave 1 fauna is dominated by bison and antelope; small animal remains are not common. Bison, antelope and deer hair from processing hides as well as feathers require assessment. The butchering and processing profiles reflected in the Promontory Caves will be informative in their own right, but comparisons with the site complex excavated by Arkush (2010) in Curlew National Grassland, Idaho directly north of Promontory Point, will also be a priority. Steward saw no evidence of horticulture and little for wild plant foods; this finding can now be closely evaluated because of our extensive bulk sampling of deposits in both caves. Rhode will oversee investigation of sediments for seeds and other macrobotanical remains (for the insights into subsistence and past climatic conditions). To date, only a single maize kernel has been recovered in Cave 2. This discovery hints at a Fremont presence in Cave 2, a find that requires further investigation as neither we nor Steward found evidence of Fremont use other than the pictographs at the back of Cave 1.

**3.3 Indices of Mobility—Obsidian and Ceramics:** While the Promontory assemblages are captivating, the caves undoubtedly saw only seasonal use. Ongoing Brigham Young faunal analyses (e.g., a deer skull with cast antlers) hint of a winter-early spring occupation (along with Steward's reasoning that snow was the primary water source). Cave occupants no doubt spent other portions of the year elsewhere. Janetski (1994) noted the profound shift in obsidian use that took place between Fremont and Promontory Phase times in Utah Valley. Fremont obsidian sources lie to the south, while northern sources dominate Promontory sites. Malad obsidian is most common, but other Idaho sources including Yellowstone, Bear Gulch and Brown's Bench are present. Twenty-two obsidian samples from the April 2011 excavations have been sourced revealing strong reliance on the Malad area roughly 100 km north with some obsidian from Brown's Bench (Hughes 2011). This clear northward orientation suggests that Promontory Phase peoples incorporated these areas in their seasonal rounds, or interacted with people who did. We will continue to source obsidian artifacts to increase our sample sizes.

With partial funding, we could not address the key area of Promontory Phase ceramics, the origins for which are poorly understood (Sapir 1923). Among legitimate possibilities would be that Promontory pottery is an incipient Apachean effort at assimilating ceramic technology, that it is a transitional ware from the terminal Fremont era made by others and traded to Apacheans, or that a number of different ethnicities made it. However that may be, we can explore mobility factors through geochemical analysis of ceramics, including Promontory sherds from the caves and Fremont and Promontory sherds found at the previously mentioned pithouses. It will be critical to determine if Fremont pastes and tempers have different geochemical signatures from Promontory pottery. Arkush's (2010) Idaho site 10Oa275, a bison and antelope processing camp, has seven bone beds and living surfaces occupied from A.D. 1050-1750; Promontory Phase pottery is common, along with Fremont wares. We will conduct investigations with time-of-flight laser ablation-inductively coupled plasma-mass spectrometry (TOF-LA-ICP-MS) of Promontory and Idaho ceramic sherds. Analysis will be undertaken by Hector Neff of the *Institute for Integrated Research in Materials, Environments, and Society* at California State University, Long Beach. These analyses will be accompanied by pilot study of bedrock geology and weathering products on Promontory Point, with sediment sampling and prospecting for potential clay and temper sources. Comparisons of chipped stone tool and debitage assemblages from the Promontory Point sites and 10Oa275 will be expanded to cherts and other toolstones to identify potential sources, aiding exploration of relationships between the Idaho and Promontory sites through stylistic and technological analyses.

**3.4 Ancient Human DNA (aDNA):** Promontory clothing was worn extensively prior to discard, creating the possibility that aDNA could be present. Malhi et al. (2003) concluded that lower sequence variation for mtDNA haplotype A among Apachean peoples than among northern Athapaskans indicated that southern Dene experienced a founder effect during their migration. MtDNA haplogroup A2a is nearly

fixed in some Apachean populations, where it is defined by a mutation at 3330. In HVRI, a subset of A2a has mutations at 16,192, 16,233, and 16,331, a motif that is found in high frequency among Navajo and Apache. If either the substitution at 3330 or this HVRI motif were to be detected in aDNA from Promontory clothing samples, it would strongly suggest that proto-Apachean populations had been there. Nevertheless, Apachean populations would by this southern latitude have absorbed members of other societies with different mtDNA. In April 2011, Shapiro sampled several moccasins recovered during controlled excavations. Our sampling protocol involved protective clothing and oral swabs of all participants, including landowning family members who had been in the caves. Three moccasins have yielded ancient Native American DNA, with sequencing indicating that mtDNA hg B (typical of Jemez/Taono O'odham/Cochimi) is present. This is not surprising given the near surface position of these moccasins in the Cave 1 strata, and the strong possibility Apachean populations accepted members of other societies. These results warrant continued efforts to seek a larger sample of genetic markers.

**3.5 Assessment of Cultural Identity:** While the idea that Promontory Phase assemblages reflect northern heritage is most compelling for the moccasins, Steward recovered more than 1000 artifacts. These and objects we recovered in April 2011 all need to be reviewed in light of increased material culture knowledge since his era. One hide preparation tool, a D-shaped tabular biface known as a *chi-tho* to Subarctic archaeologists, seems absent in Fremont and other late period assemblages in the Great Basin. These tools are common in the Subarctic, where they are consistently used in the final stages of softening leather (the Promontory leather is of exceptional quality, especially in comparison with Fremont era moccasins). One Promontory tabular biface is identical to Yukon examples in both archaeological and ethnological collections (Thompson 1994). We are seeking funding for a graduate student who will explore the temporal and geographic distribution of *chi-thos* in intervening northern Plains settings and Great Basin sites (e.g., Dyck and Morlan 1995) and through ethnoarchaeological investigations in Dene communities where such implements remain in use. Promontory basketry, matting, rattles, and gaming pieces all need to be assessed against northern Dene ethnological collections (Marie and Thompson 2002; Zolbrod 1984; Culin 1907).

**3.3 Research Collaboration with First Nation/Native American Representatives:** In a 2009 *Dene Migration Workshop* convened by Mr. Bruce Starlight (Tsuu T'ina First Nation, Calgary) with Rice and Ives, Navajo, Apache, and Dene representatives from British Columbia, Alberta, Saskatchewan and the NWT expressed strong interest in establishing sustained contact among their communities, and in articulating an international Dene identity. This project can contribute to these Dene aspirations. We are seeking support to pursue three key objectives: 1) to convene workshops for skilled Dene artisans and other communities who may have been in contact with Apachean ancestors (e.g., Blackfoot, Shoshone) to provide expert opinions on the manufacture of Promontory moccasins and other artifacts; 2) to collect Dene vocabulary about these material culture practices and artifacts to help determine potential historical connections between Dene communities in Canada and the U.S.; and 3) to learn more about Dene oral traditions about migration, and specific facets of human population movements. A moccasin sewing workshop held during the 2009 Canadian Indigenous Language and Literacy Development Institute (CILLDI) session, involving Dene, Sûline, Cree, and Blackfoot experts, led to a fruitful exchange of ideas about moccasin manufacture and use among participants. We collected terms for moccasin parts, raw materials and hide working tools, observed cultural variation in manufacturing styles and decorative techniques, and explored issues such as who made and repaired moccasins (e.g., both men and women might make moccasins). Interaction with expert artisans is will provide deeper insights into the high skill levels exhibited in many of the Promontory moccasins, and may suggest additional ways in which to refine hypotheses for testing. We will use the CILLDI format for further work with moccasins, as well as for annual topics to include gaming and hide processing (supporting graduate student research on this project). We also wish to convene Dene and Shoshone sewing experts at the UMNH to provide their insights with first hand viewing of Promontory moccasins.

## References

- Aikens, C. Melvin. 1967. Plains Relationships of the Fremont Culture: A Hypothesis. *American Antiquity* 32(2):198-209.
- Anthony, David W. 1990. Migration in Archeology: The Baby and the Bathwater. *American Anthropologist*, New Series, Vol. 92 (4): 895-914.
- Anthony, David W. 2007. *The Horse, the Wheel, and Language. How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World*. Princeton: Princeton University Press.
- Arkush, B. S. 2010. Recent Excavations at 10Oa275: A Big-Game Processing Camp on the Curlew National Grassland, Southeastern Idaho. Paper read at the 32nd Biennial Great Basin Anthropological Conference, Davis Conference Center, Layton, Utah, October, 2010.
- Asch, Michael I. 1980 Steps Toward the Analysis of Athapaskan Social Organization. *Arctic Anthropology* 17(2):46-51.
- Asch, Michael I. 1988. *Kinship and the Drum Dance in a Northern Dene Community*. The Circumpolar Research Series. Edmonton: The Boreal Institute for Northern Studies and Academic Printing and Publishing.
- Baillargeon, Morgan. 2010. *North American Aboriginal Hide Tanning. The Act of Transformation and Revival*. Canadian Museum of Civilization, Mercury Series, Ethnology 146.
- Benson, Larry V., Michael S. Berry, Edward A. Jolie, Jerry D. Spangler, David W. Stahle, and Eugene M. Hattori. 2007. Possible impacts of early-11th-, middle-12th-, and late-13th-century droughts on western Native Americans and the Mississippian Cahokians. *Quaternary Science Review* 26:336-350.
- Brettell, C. B., and J. F. Hollifield. 2008 *Migration Theory: Talking Across Disciplines*. Second Edition. Routledge, Taylor and Francis Group, New York.
- Cabana, G. S. and J. J. Clark. 2011 *Rethinking Anthropological Perspectives on Migration*. University Press of Florida, Gainesville, Florida.
- Culin, Stewart. 1907. *Games of the North American Indians*. Smithsonian Institution, Bureau of American Ethnology, annual report for 1902-3.
- Dyck, Ian and Richard G. Morlan. 1995. *The Sjøvold Site. A River Crossing Campsite in the Northern Plains*. Archaeological Survey of Canada Mercury Series Paper 151. Hull, Quebec: Canadian Museum of Civilization.
- Eggan, Fred. 1980 Shoshone kinship structures and their significance for anthropological theory. *Journal of the Steward Anthropological Society*, 11(2):165-193.
- Eiselt, Bernice Sunday. 2006. *The Emergence of Jicarilla Enclave Economy During the 19th Century in Northern New Mexico*. Ph.D. Dissertation, Department of Anthropology, University of Michigan.
- Eiselt, Bernice Sunday. In prep. "Becoming White Clay." *A History and Archaeology of Jicarilla Apache*

*Enclavement*. Manuscript in possession of the author.

Forsyth, Donald W. 1986. Post-Formative Ceramics in the Eastern Great Basin. *Journal of California and Great Basin Anthropology* 8(2):180-203.

Foster, Michael K. 1996. Language and the culture history of North America. In *Handbook of North American Indians*, Volume 17, *Subarctic*, edited by Ives Goddard, pp. 64-110. Smithsonian Institution Press, Washington.

Golla, Victor. 2008. Discussant Remarks, Ways of Becoming: Dynamic Processes in the Creation of Athapaskan Identities and Landscapes Symposium, 73rd Annual Meeting of the Society for American Archaeology, March 26-30, 2008, Vancouver, Canada.

Gunnerson, James H. 1956. Plains-Promontory Relationships. *American Antiquity* 22(1):69-72.

Hare, P. Gregory, Sheila Greer, Ruth Gotthardt, Richard Farnell, Vandy Bowyer, Charles Schweger, and Diane Strand. 2004. Ethnographic and archaeological investigations of alpine ice patches in Southwest Yukon, Canada. *Arctic* 57(3): 260-272.

Hughes, Richard E. 2011. Geochemical Research Laboratory Letter Report 2011-57, Dispersive X-ray Fluorescence (edxf) Analysis of 22 Obsidian Artifacts from Promontory Caves 1 and 2 (42B01 and 42B02).

Ives, John W. 1990. *A Theory of Northern Athapaskan Prehistory*. Westview Press/University of Calgary Press; Boulder, Colorado/Calgary, Alberta.

Ives, John W. 1998. Developmental processes in the pre-contact history of Athapaskan, Algonquian and Numic kin systems. In *Transformations of Kinship, the Round Table: Dravidian, Iroquois and Crow-Omaha Kinship Systems*, edited by Maurice Godelier Thomas R. Trautmann, and Franklin Tjon Sie Fat, pp. 94-139. Washington and London: Smithsonian Institution Press.

Ives, John W. 2003. Alberta, Athapaskans and Apachean origins. In *Archaeology in Alberta, A View from the New Millennium*, edited by Jack W. Brink and John F. Dormaar, pp. 256-289. Medicine Hat, Alberta: The Archaeological Society of Alberta.

Ives, John W. 2010. Dene-Yeniseian, Migration and Prehistory. *Anthropological Papers of the University of Alaska*, Volume 5 (1-2):324-334. Special Issue, *The Dene-Yeniseian Hypothesis*, edited by J. Kari and B. Potter.

Ives, John W. In prep. Resolving the Promontory Enigma. In *Advances in Great Basin and Southwestern Archaeology: Essays in Honor of Don Fowler*, edited by J. C. Janetski and N. Parezo. University of Utah Press.

Ives, J. W., E. J. Vajda and S. Rice. 2010. Dene-Yeniseian and Processes of Deep Change in Kin Terminologies. *Anthropological Papers of the University of Alaska*, Volume (New Series) 5(1-2):223-256. Special Issue, *The Dene-Yeniseian Connection*, edited by J. Kari and B. Potter.

Janetski, Joel, 1994. Recent transitions in the eastern Great Basin: The archaeological record. In *Across the Desert West, Human Population Movement and the Expansion of the Numa*, edited by David B.



Madsen and David Rhode, pp. 157-178. University of Utah Press, Salt Lake City.

Janetski, Joel and Grant C. Smith 2007. *Hunter-Gatherer Archaeology in Utah Valley*. Occasional Paper No. 12, Museum of Peoples and Cultures, Brigham Young University.

Kankainen, Kathy. 2005. Personal communication regarding AMS radiocarbon dating of Promontory Cave moccasins. Utah Museum of Natural History, University of Utah.

Kehoe, Thomas F. 1966. 'The small side-notched point system of the northern plains'. *American Antiquity* 31(6): 827-841.

Kirch, P. V. and R. C. Green. 2001. *Hawaiki, Ancestral Polynesia: An Essay in Historical Anthropology*. Cambridge University Press, Cambridge.

Krauss, Michael E. and Victor K. Golla. 1981. Northern Athapaskan languages. In *Handbook of North American Indians, Volume 6, Subarctic*, edited by June Helm, pp. 67-85. Smithsonian Institution Press, Washington.

Lévi-Strauss, Claude. 1969. *The Elementary Structures of Kinship*. New York: Basic Books.

Magne, Martin P. R. and Daryl Fedje. 2007. The spread of microblade technology in northwestern North America. In *Origin and Spread of Microblade Technology in Northern Asia and North America*, edited by Yaroslav Kuzmin, Susan G. Keates, and Chen Shen, pp. 171-188. Archaeology Press, Simon Fraser University, Burnaby, B.C.

Malhi, Ripan, Angelica Gonzalez-Oliver, Kari Britt Schroeder, Brian M. Kemp, Jonathan A. Greenberg, Solomon Z. Dobrowski, David Glenn Smith, Andres Resendez, Tatiana Karafet, Michael Hammer, Stephen Zegura, and Tatiana Brovko. 2008. Distribution of Y chromosomes among Native North Americans: A Study of Athapaskan Population History. *American Journal of Physical Anthropology* 137:412-424.

Malhi, Ripan S., Holly M. Mortensen, Jason A. Eshleman, Brian M. Kemp, Joseph G. Lorenz, Frederika A. Kaestle, John R. Johnson, Clara Gorodezky, and David Glenn Smith. 2003. Native American mtDNA prehistory in the American Southwest. *American Journal of Physical Anthropology* 120:128-124.

Marie, Suzan. and Judy Thompson. 2002. *Dene Tsu'keghái Tene Rahesj. Dene Spruce Root Basketry*. Canadian Museum of Civilization Mercury Series, Ethnology Paper 138.

Marie Suzan and Judy Thompson. 2004. *Whadòq Tehmì. Long Ago People's Packsack. Dene Babiche Bags: Tradition and Revival*. Canadian Museum of Civilization Mercury Series, Ethnology Paper 141.

Matson, R. G. and Martin P. R. Magne. 2007. *Athapaskan Migrations. The Archaeology of Eagle Lake, British Columbia*. University of Arizona Press.

Ortman, S. G. 2009. *Genes, Language and Culture in Tewa Ethnogenesis, A.D. 1150-1400*. Ph.D. Dissertation, Arizona State University.

Osgood, C. 1970. *Ingalik Material Culture. Yale University Publications in Anthropology* Number 22. Reprinted from the 1940 edition. New Haven: Human Relations Area Files Press.

- Sabloff, Jeremy A. 2008. *Archaeology Matters, Action Archaeology in the Modern World*. Left Coast Press, Walnut Creek, California.
- Perry, R. J. 1980. The Apachean transition from the Sub-arctic to the Southwest. *Plains Anthropologist* 25(90):279-296.
- Sapir, Edward. 1923. A note on Sarcee pottery. *American Anthropologist*, New Series, Vol. 25 (2 ): 247-253.
- Sapir, Edward. 1936. Internal linguistic evidence suggestive of the northern origin of the Navaho. *American Anthropologist* 38: 224-235.
- Simms, Stephen R., Jason R. Bright, and Andrew Ugan. 1997. Plain-Ware Ceramics and Residential Mobility: A Case Study from the Great Basin. *Journal of Archaeological Science* 24:779-792.
- Smith, Grant C. 2004. *Promontory Ware or Promontory Gray? Revisiting the Classification Problems of Eastern Great Basin Ceramics*. MA Thesis, Department of Anthropology, Brigham Young University.
- Steele, James. 2009. Human Dispersals: Mathematical Models and the Archaeological Record. *Human Biology* 81(2-3):121-140.
- Steward, Julian. 1937. *Ancient Caves of the Great Salt Lake Region*. Smithsonian Institution Bureau of American Ethnology Bulletin 115. Washington.
- Thompson, Judy. 1990. *Pride of the Indian Wardrobe. Northern Athapaskan Footwear*. Bata Shoe Museum, University of Toronto Press.
- Thompson, Judy. 1994. *From the Land. Two Hundred Years of Dene Clothing*. Canadian Museum of Civilization, Hull, Quebec.
- Trigger, B. G. 2008. *A History of Archaeological Thought*. 2nd ed. Cambridge: Cambridge University Press.
- Walde, Dale A. and David Meyer. 2003. Precontact pottery in Alberta: an overview. In *Archaeology in Alberta, A View from the New Millennium*, edited by Jack W. Brink and John F. Dormaar, pp. 132-152. Medicine Hat, Alberta: The Archaeological Society of Alberta.
- Warburton, M., Begay R. M. 2005. An exploration of Navajo-Anasazi relationships. *Ethnohistory* 52:533-561.
- Wilcox, David R. 1981. The entry of the Athapaskans into the American southwest: The problem today. In *The Protohistoric Period in the North American Southwest, AD 1450-1700*, edited by David R. Wilcox and W. Bruce Masse, pp. 213-256. Arizona State University Anthropological Research Papers Number 24.
- Wilmeth, Roscoe. 1979. An Athabaskan hypothesis. *Canadian Journal of Archaeology* 3:33-40.

Wilson, J. A. P. 2011 *Material Cultural Correlates of the Athapaskan Expansion: A Cross-Disciplinary Approach*. Unpublished Ph.D. Dissertation, University of Florida.

Zolbrod P. G. 1984. *Diné bahane. The Navajo Creation Story*. (University of New Mexico Press, Albuquerque).

Results from this project are and will be communicated through presentations at national and regional conferences such as the *Society for American Archaeology*, the *Canadian Archaeological Association*, the *Plains Anthropological Society*, and the *Great Basin Anthropological Association*, and in their peer-reviewed journals. Major disciplinary journals (*American Antiquity*, *Current Anthropology*, and the *Journal of Anthropological Archaeology*) will be suitable venues. Should certain results warrant such reporting (e.g., conclusive genetic results linking Dene peoples to the moccasins), articles will be submitted to high profile multidisciplinary journals (*Nature*, *Science*, *PNAS*, or *PLoS One*). The acquisitions editor of the University of Utah press has requested that Ives develop a manuscript concerning the Promontory research and Apachean origins, an idea to be explored during a sabbatical anticipated for 2013-14. Science journalist Heather Pringle, who writes for *Archaeology* magazine, *National Geographic* and *Science* has expressed a direct interest in articles concerning this research.

The *Institute of Prairie Archaeology* features this research on its web page, and will regularly update results; the *Institute* also uses a large screen format in a street level display of research activities in HUB Mall at the University of Alberta. This research is a featured subject and will also be regularly updated: average daily foot traffic in HUB Mall is 22,000 persons. The display has proved effective in student recruitment and has stimulated interdisciplinary contacts on campus. The applicant works regularly with the *Archaeological Society of Alberta* where project results will be presented to lay groups.

This project can form the basis of a travelling museum exhibition of great public interest; it is our intention to explore this avenue during the concluding years of the proposed research. Initial contacts concerning an exhibit with the Utah Museum of Natural History (UMNH) (which has been highly supportive of the research, and for which Ives has produced both web and display interpretive material concerning the Promontory assemblages) and the Royal Alberta Museum have been promising. Both institutions are at major turning points, however, and will not be in a position to participate immediately. The UMNH is slated to re-open a major new facility in late 2011; further display and collections management activities will be a top priority there for some time. The existing Royal Alberta Museum will also close shortly, so that development of a major new facility can begin in downtown Edmonton, with an opening planned for 2015. Neither institution can make commitments at this moment, but the prospects for the final years of the project (when our results will be most complete) are excellent.

It will be critical to provide results of this research to Dene communities deeply interested in it. The *Dene Language Conference* provides annual opportunities for presentations and interaction with Dene speakers, an arena in which Ives and Rice will be active. The annual offering of the *Canadian Indigenous Languages and Literacy Development Institute* (CILLDI) program (three weeks each July, attended by speakers from 60-80 communities, many of them Dene) will be key venues. We will use themed activity sessions in CILLDI to allow elder participation aimed at stimulating and recording language use for the purpose of fostering language revitalization with younger speakers. These sessions will capture vocabulary use in themed areas, and use digital archiving to make this information accessible to community members.

**Schedule: 2012**—*American Antiquity* article on collections based AMS dating; *American Journal of Physical Anthropology* article on moccasin size and population structure in Promontory caves; CILLDI session on hide working and moccasin sewing; Regional US & Canadian Conferences.

**2013**—*Journal of Anthropological Archaeology* article contextualizing Apachean origins and reporting Promontory evidence. Regional US & *Society for American Archaeology* (SAA) meetings; CILLDI session on traditional gaming (hoop, hand, dice and other games). UMNH workshop on Promontory clothing at UMNH, Salt Lake City. *Archaeological Society of Alberta* presentations.

**2014**—*Canadian Archaeological Association* session, cumulative results of research. Journal articles detailing research results.

**2015**—SAA Symposium on cumulative results of collaborator and graduate student research.

Family name, Given name

IVES, John

**Intended Outcomes of Proposed Activities**

Elaborate on the potential benefits and/or outcomes of your proposed research and/or related activities.

**Scholarly Benefits**

Indicate and rank up to 3 scholarly benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	Knowledge creation/intellectual outcomes	
2	Enhanced research collaboration	
3	Student training/skill development	

**Social Benefits**

Indicate and rank up to 3 social benefits relevant to your proposal.

Rank	Benefit	If "Other", specify
1	Cultural outcomes	
2	Social outcomes	
3	Enhanced professional practice	

**Audiences**

Indicate and rank up to 5 potential target audiences relevant to your proposal.

Rank	Audience	If "Other", specify
1	Academic sector/peers, including scholarly associations	
2	Aboriginal Peoples	
3	General public	
4	Para-public institutions (museums, libraries, etc.)	
5	Students	

Family name, Given name

IVES, John

## Expected Outcomes Summary

Describe the potential benefits/outcomes (e.g., evolution, effects, potential learning, implications) that could emerge from the proposed research and/or other partnership activities.

Sabloff (2008) argues in *Archaeology Matters, Action Archaeology in the Modern World* that archaeologists need to make their work relevant for real issues today. Our research investigates an archaeological record with a direct bearing on one of the most significant migrations in New World prehistory, Apachean departure from the Canadian Subarctic. Today's world is awash in the consequences of migration; many daily headlines reflect human migration directly, or have migration as a subtext. Moreover, Apachean migration occurred during a time of profound climatic change (Benson et al. 2007). Most occupation of the Promontory Caves by specialized bison hunters took place in the 13th century, from AD 1276-1301, when a profound drought signaled the end of Fremont material culture in the Great Basin, retraction of the Puebloan world in the Southwest and collapse of the Cahokia phenomenon in the Mississippian world. The transit of Apachean ancestors can provide vital analogies for problems of paramount importance today: Apachean ancestors left a comparatively water rich world for arid Great Basin, Southwestern and southern Plains homes, often filling "interstitial spaces" left behind by horticulturalists (e.g., Fremont and Upper Republican peoples) who could no longer sustain those lifeways. Yet, many Apachean speakers would become at least part time horticulturalists and pastoralists by the historic period. Here, archaeological research can offer relevant comparisons and contrasts for critical cultural and environmental factors today.

We are seeking unique opportunities for graduate research. The degree of preservation reflected in the Promontory Caves is astonishing. Virtually everything that could be left from daily residential life has remained. This allows not merely for acutely framed research questions with extraordinary temporal control, but will impact long term student attitudes about the archaeological record. While it is possible to explore test implications of hypotheses concerning migration and interaction in unparalleled ways, students can also see how carefully we must frame our work even in this case. In this way, the Promontory materials inevitably teach researchers humility---even good archaeological records elsewhere pale in comparison. Museum collections and works like Osgood's (1970) *Ingalik Material Culture* show how the greatest part of Dene material cultures were organic, yet are typically deleted from archaeological records. The Promontory caves provide an object lesson in how narrow our view of prehistoric material culture is without perishable artifacts.

Dene traditionalists from the American Southwest to the Canadian Subarctic express great pride in the way their ancestors' pragmatism and deep attachment to language allowed them to expand across western North America. This research can help Dene people tell that story, in ways that join scholarly perspectives with rich oral traditions. Baillargeon (2010) makes an important point in saying that the person in a community committed to traditional preparation of hides and sewing is also the person leading efforts to revitalize language and recapture the use of First Nations material culture (e.g., Marie and Thompson 2004). Our research can aid those individuals, making accessible these sectors of material cultural use and linking them to a tangible past. Finally, Apachean migration is the last great leg in a Dene-Yeniseian language family story extending from Siberia to northern Mexico, subject matter that grips the popular imagination. Our knowledge mobilization plan can bring that journey to wider audiences, in ways that will foster greater understanding for the complexity of the First Nations heritage among mainstream Canadians.

## DESCRIPTION OF THE RESEARCH TEAM

Archaeologists interested in Dene expansion in western North America have tended to work in relative isolation from regional and subject matter experts situated outside their normal sphere of activity, but Dene history and cultural geography are immense. It is virtually impossible for any single researcher to “control” the several relevant literatures. Research into Apachean migration can be most effectively treated in a holistic fashion, where the researchers involved can develop independent lines of investigation with a bearing on complex phenomena. The proposed project unites researchers having not only analytical specializations germane to the problem, but detailed knowledge of the several archaeological records and a larger scholarly context relevant to Dene migration.

**John W. Ives:** Ives (Department of Anthropology/Institute of Prairie Archaeology, University of Alberta) will serve as the Principal Investigator for the project, coordinating the activities of the collaborators listed below, making specific investigations of the Promontory perishable collections, and synthesizing overall results. Ives directed April 2011 excavations in Cave 1. This will continue to be his primary research priority (40% of project). As Executive Director of the *Institute of Prairie Archaeology*, Ives oversees his Department’s archaeological field school (40% of research activity). He is a collaborator in Claire Bown’s *Dynamics of Hunter-Gatherer Language Change* project (NSF).

**Joel C. Janetski:** Janetski (Emeritus Professor, Department of Anthropology, Brigham Young University) has extensive Great Basin archaeological experience, and is the leading authority on the Promontory Phase. Janetski directed excavations in Cave 2, and is conducting research concerning Promontory ceramics, faunal remains, and lithics (including oversight of obsidian sourcing). Janetski’s primary current research commitments (80%) are to the *Grand Gulch Basketmaker: Stable Isotope Chemistry, AMS Radiocarbon dating and Documentation of Burial Context* (Co-Applicant, U.S. National Science Foundation), and completion of research reporting for several years of work in the Grand Staircase-Escalante National Monument. He will contribute to 15% of the proposed project (representing 20% of his current program of research).

**Sally Rice:** Rice (Professor, University of Alberta) has interests in semantics, comparative linguistics, and revitalization of endangered languages, and has been extensively involved in U.S. NSF, SSHRC, and Canadian Institute for Language and Literacy Development (CILLDI) initiatives related to Dene language. Rice and Ives have collaborated extensively on a *Pan-Athapaskan Comparative Lexicon* project over the last several years. Rice will be responsible for eliciting, recording and analyzing moccasin, sewing, and hide preparation terms used by Dene craftspersons, and for determining to what extent Canadian Dene and Apachean speakers share these usages. She will also take part in interviews with landowner George Chournos concerning the history of his family’s protection of Caves 1 and 2. This will contribute 10% of the project work and comprises 5% of Rice’s overall research activities.

**Duane G. Froese:** Froese (Associate Professor & Canada Research Chair, Earth and Atmospheric Sciences, University of Alberta) is a Quaternary specialist who regularly works in multidisciplinary settings in a broad range of NSF, NSERC and projects. He will be responsible for assessment of the stratigraphy of renewed excavation units in Promontory Caves 1 and 2, and geomorphological appraisal of the cave settings. He will also work closely with Ramsey and Ives to evaluate the suite of radiocarbon ages, especially the implications of Bayesian modeling in interpreting the dates. This will comprise 5% of the proposed project work and represent 5% of his current research work.

**Beth Shapiro:** A 2009 MacArthur Fellow, Shapiro (Shaffer Associate Professor of Biology Department of Biology, The Pennsylvania State University) is a biologist specializing in the recovery of ancient DNA. She is currently involved in a major U.S. NSF project, *Understanding the Role of Environmental Change on the Long-term Population Dynamics of One Surviving and Two Extinct Arctic Mammals* and NASA Astrobiology Institute project, *PSARCI: Signatures of life from Earth and*

*Beyond.* Shapiro will direct efforts to recover ancient human DNA from items of Promontory clothing, supervising her PhD student Kristine Korzow Richter. This will comprise 5% of project activities.

**B. Sunday Eiselt:** Eiselt (Assistant Professor, Southern Methodist University) is currently Director of the SMU-in-Taos Archaeology Field School, its programs and projects. Her earlier research involved the relationship between ceramic production and the formation of Jicarilla Apache enclaves near eastern Pueblo communities. Eiselt will be actively involved in the time-of-flight laser ablation-inductively coupled plasma-mass spectrometry (TOF-LA-ICP-MS) of Promontory and Idaho ceramic sherds and efforts toward determining temper and clay sources. Her Field School responsibilities, with significant Apache outreach activities, and other Southwestern research interests occupy 90% of her time, leaving 10% to devote to this proposed project. This will also comprise 5% of the project work.

**David Rhode:** Rhode is a Research Professor, Division of Earth and Ecosystem Sciences, *Desert Research Institute* (with affiliations to the University of Nevada-Reno) in Nevada. His particular specialization involves analysis of macrobotanical samples, with various plants comprising the most abundant organic component of the Promontory deposits. Rhode has a long term interest in ancient Great Basin environments, particularly those of Lake Bonneville; his additional interests include a Palaeolithic research project on the Tibetan Plateau. He will be responsible for recovery and analysis of plant remains from Caves 1 and 2, and their interpretation regarding subsistence and climate.

**Brooke Arkush:** A Professor at Weber State University, Utah, Arkush directs their Archaeological Technician Program and has run a series of field schools in Curlew National Grassland, Idaho. He has worked with a complex of bison kill and processing sites that share connections with Promontory Point, and may reflect a different portion of the subsistence settlement system of peoples who lived in the Promontory caves. He has particular interests in communal hunting in western North America. (5%)

**Kisha Supernant:** An Assistant Professor, University of Alberta, Supernant has interests in archaeological mapping, defensive sites and conceptions of defensibility, and GIS applications in archaeology each pertinent to our Promontory research. Supernant will be involved in student use of 3D virtual representations of the caves as research and interpretive tools, in GIS applications for spatiotemporal distribution of artifacts such as chi-thos in western North America, and use of spatial data to provide objective assessment the highly defended nature of the Promontory cave locus. (5%)

**Michael Billinger:** Billinger is a biological anthropologist working as an independent researcher with interests in human osteology, forensics, and the concept of race. He has particular skills we are applying in the anthropometric assessment of moccasin size as a proxy for stature and age, providing unique insights into population structure in the Promontory Caves. (5%)

**Christopher Bronk Ramsey and Fiona Brock:** Bronk Ramsey is Professor and Director of the *Research Laboratory for Archaeology and the History of Art*, University of Oxford. He will have general oversight of the extensive suite of AMS radiocarbon dates we will assemble, and will be directly responsible for the Bayesian statistical modelling used to assess the entire sample of dates. Brock will be directly involved in sample processing, a critical area since the Promontory collections have a complex curation history, so that pre-treatment care is vital. This is a critically important component of the project, though it will not be especially time consuming once the samples have been processed (5%).

## STUDENT TRAINING STRATEGIES

This project will provide training for undergraduate and graduate students, exposing them to activities ranging from extracting useful information from archival sources and protocols for establishing contact with curatorial institutions to determine where other Promontory materials may reside, through to the cutting edge techniques employed by team researchers. Because the proposed research has a four year course, I would in the future like to accept an additional graduate student for the specific purpose of advancing comparative ceramic research concerning Promontory Phase pottery, in order to better elucidate its relationship with Fremont, northern Plains and Dismal River wares (where



there are significant similarities). This student would be involved in efforts to pinpoint temper and clay sources, thin section and petrographic analyses, and further applications of TOF-LA-ICP-MS and similar technologies. Three current students have direct roles in Promontory Cave work:

**Gabriel Yanicki (University of Alberta):** Currently finishing his MA on the Old Man's Playing field in the Upper Old Man River, Yanicki will be accepted into the University of Alberta PhD program in January 2012. He will then diversify his approach to gaming and societal interaction by examining the relationship between the Fremont and Promontory Cultures. He will have access to the abundant cane dice, bone hand game pieces, and hoop and dart pieces from Cave 1, and will undertake collections based research on Great Salt Lake sites (Levee, various Bear River and related sites) where Promontory Phase materials also occur. With my supervision, he will also be responsible for excavating a pithouse site 3 km south of the Promontory caves that is yielding both Fremont and Promontory Phase pottery—a site with great potential to illuminate the Fremont-Promontory relationship. One year of PhD level funding requested here will support this research.

**Aileen Reilly (University of Alberta):** The cave materials provide a comprehensive record of the hideworking process, leaving us not only with specific stone and bone tools, but the by-products of the hide working process, including copious quantities of fur from dehairing hides, remnant strips of bison robes, and tool marks directly on the leather. Reilly has been accepted as an MA student to make ethnoarchaeological study of hide working tools still in use, to look at the spatio-temporal distribution of *chi-thos* (of the D-shaped tabular variety consistently used by Dene in terminal stages of graining and softening fine leather), and their occurrence in the Promontory record where they are atypical.

**Todd Kristensen (University of Alberta):** Kristensen will make a PhD investigation of the relationship between high altitude ice patch sites yielding organic artifacts in the NWT and lower altitude base camps that supported such activities among Shuhtagot'ine Dene. His research can create a number of synergies with research team members and graduate students, notably ethnoarchaeological opportunities, material culture lexicon work with archaeological implications, and comparisons of perishable materials from the ice patch and dry cave contexts. One year of PhD level funding will support this research.

**Undergraduates (University of Alberta):** Students will be directly involved literature review, finding and extracting information from archival sources, establishing contact with curatorial institutions to determine if they have Promontory holdings, and data base entry and management.

## PREVIOUS AND ONGOING RESEARCH RESULTS

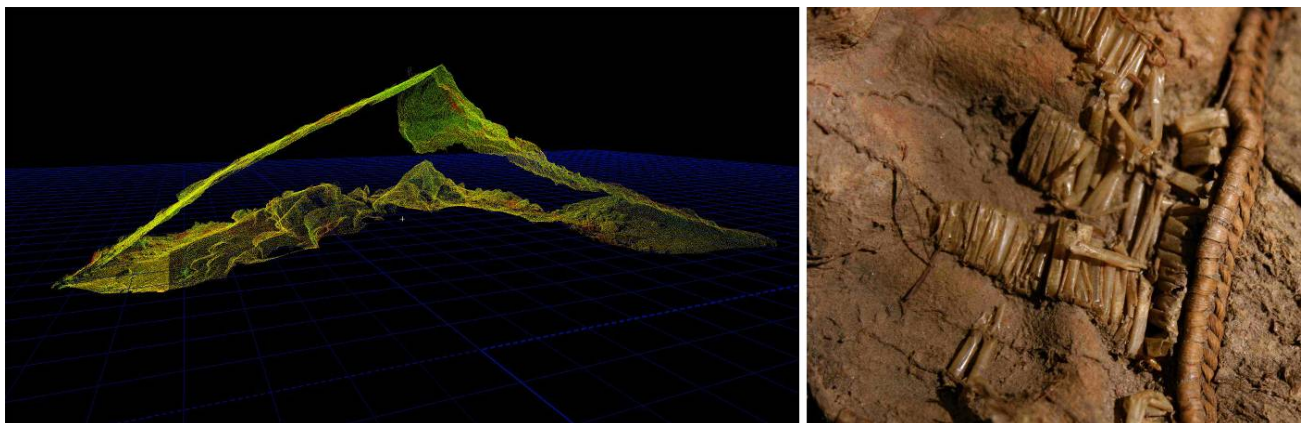
Funding through SSHRCC Standard Research Grant-1A 410-2010-0480 allowed for exceedingly valuable progress on this project, proving its potential. Because the award was made for a one year at just under one third of the original request, there have been time constraints on what can be accomplished and a need to prioritize key activities. Coupled with extensive in kind support from Janetski and Brigham Young (access to a full suite of field equipment and graduate volunteers), Shapiro (travel, sampling and processing for aDNA), and the full cooperation of the Utah Museum of Natural History (UMNH), we are most gratified with the results obtained in the last 18 months. An April 2010 visit allowed further assessment of existing UMNH collections (including copies of detailed analytical records for each moccasin), sampling of 30 moccasins by Shapiro for aDNA recovery, a field visit to the Promontory Caves, and successful negotiations with the landowning family (who have protected the caves from vandalism since the 1930s) to permit excavations in Caves 1 and 2. An August visit to the UMNH allowed addition of further metric data from Steward's moccasin sample and AMS sampling from 47 additional artifacts. With detailed collections data, we created a moccasin database from Steward's work and our own observations. Accumulating AMS dates let us assess trends in moccasin size and refinement of sewing through time. We have established precise relationships among moccasin size, foot size, stature and age, allowing a clearer picture of the population structure inhabiting the caves.

During 2010-2011, Brigham Young University (Janetski and a graduate student) supported additional

obsidian source analyses for Cave 1, three further AMS dates for ceramic residues, and analysis of Steward's faunal sample (including three additional AMS dates). Shapiro and a PhD student completed analysis of ten moccasin samples from the collections, while Oxford University (Ramsey and Brock) provided an additional 22 AMS dates on Promontory Cave 1 artifacts (primarily moccasins, but also the bow and hoop and dart gaming pieces). These dates (bringing our project sample to 39 ages) are currently the subject of additional Bayesian modeling for specific test implications.

April 2011 excavations in Promontory Caves 1 and 2 were attended by Ives, Rice and Yanicki (University of Alberta), Janetski as well as three current MA students and one former MA student from Brigham Young, Rhode (Desert Research Institute), Associate Curator Michelle Knoll of the UMNH (a PhD candidate at the University of Utah) and Arkush (Weber State College). Arkush also facilitated a visit to the Malad, Idaho obsidian sources. The April 2011 excavations were phenomenally successful revealing even thicker, equally rich Promontory deposits, with bison, deer and antelope fur, leather and hide scraps, split feathers (for fletching arrows), porcupine quills, cordage, six moccasins or fragments thereof, a mitten lining, dozens of cane dice, various lithics, ceramics, animal dung, and extensive bison and antelope faunal remains. Brigham Young University supported detailed sorting and processing of thousand of objects and sediment samples (completed in August of 2011). In April 2011, Shapiro drew sediment samples, and sampled moccasins from our excavation and the landowner's small collection that have yielded ancient human DNA. Twenty- two obsidian artifacts were sourced in July of 2011. Oxford University is currently processing an additional six moccasin samples from known depths in April's controlled excavation, promising our first look at the stratigraphic integrity of layers within the Promontory Phase in Cave 1. We also conducted detailed laser mapping of the interiors of Cave 1 and 2.

Clearly, Promontory Cave 1 deposits can sustain sophisticated hypothesis testing about the inhabitants and their activities, as outlined in our detailed proposal. Early phases of this project have required coordination of many activities among a wide array of collaborators during a condensed period of time, while receiving a stream of important analytical information. This has created challenges in bringing information to publication. Nevertheless, as reflected in CV materials, Ives accepted Janetski's invitation to speak about the Promontory Culture in the 2011 *Society for American Archaeology* meetings, a paper already submitted for a University of Utah Press publication. Ives also has a paper on Apachean origins submitted and under revision for the *Canadian Journal of Archaeology*. A "hinge point" in our research concerns the large volume of information generated from existing collections; we are therefore submitting a paper on comprehensive AMS dating of those materials to *American Antiquity*. Billinger and Ives are finishing a paper linking moccasin size and the population structure of the caves for the *American Journal of Physical Anthropology*. All four of these publications reflect research results funded in part by SSHRC. They will set the stage for the next phase of Promontory research, moving beyond collections analysis to findings arising from renewed excavations the caves.



**Left**, 3D cross-section of Cave 1 (laser mapping); **right**, intricate quillwork on a Promontory moccasin.

Family name, Given name  
**IVES, John**

### Funds Requested from SSHRC

For each budget year, estimate as accurately as possible the research costs that you are asking SSHRC to fund through a grant. For each Personnel costs category, enter the number of individuals to be hired and specify the total amount required. For each of the other categories, enter the total amount required.

	Year 1		Year 2		Year 3		Year 4		Year 5	
<b>Personnel costs</b>	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
<b>Student salaries and benefits/Stipends</b>										
Undergraduate	2	1,000	2	1,000	2	1,000	0	0	0	0
Masters	1	3,824	1	3,824	1	3,824	0	0	0	0
Doctorate	1	4,002	1	4,002	1	4,002	1	4,002	0	0
<b>Non-student salaries and benefits/Stipends</b>										
Postdoctoral										
Other										
<b>Travel and subsistence costs</b>										
	Year 1		Year 2		Year 3		Year 4		Year 5	
<b>Applicant/Team member(s)</b>										
Canadian travel	5,200		1,700		0		1,200		0	
Foreign travel	8,260		15,960		4,980		4,800		0	
<b>Students</b>										
Canadian travel	7,700		1,600		1,800		600		0	
Foreign travel	6,380		6,380		4,215		3,600		0	
<b>Other expenses</b>										
Professional/Technical services	19,390		17,390		12,160		1,500		0	
Supplies	6,510		2,760		2,760		1,160		0	
<b>Non-disposable equipment</b>										
Computer hardware										
Other										
<b>Other expenses (specify)</b>										
Research Subject Fees	1,000		1,000		800		400		0	
Landowner Support, Field Camp	1,000		1,000		1,000		0		0	
Helicopter Charter	9,600		0		0		0		0	
<b>Total</b>	73,866		56,616		36,541		17,262		0	

**PERSONNEL COSTS (\$30,480 Total over 4 years, ALL FUNDS CANADIAN)**

Personnel expenses use University of Alberta rates (collective agreement, graduate students) for thesis related work: graduate allocations based on 4 months, 18hrs/week. Graduate students will undertake collections/archival research, prepare for and conduct of fieldwork, process field records and materials, and undertake analyses (e.g., point cloud data from laser mapping). We will employ undergraduates for smaller research tasks. **Yr 1:** 1 MA student (Reilly @ \$3823.9), 1 PhD student (Yanicki, @ \$4002.10) and two undergraduates (@ \$500 each x 2 = \$1000) (**total = \$8826**). **Yr 2:** 1 MA student (Reilly @ \$3823.9), 1 PhD student (Yanicki, @ \$4002.10) each for 4 months, 18hrs/week, and two undergraduates (@ \$500 each x 2 = \$1000) (**total = \$8826**). **Yr 3:** 1 MA student (to be accepted @ \$3823.9), 1 PhD student (Yanicki, @ \$4002.10) and two undergraduates (@ \$500 each x 2 = \$1000) (**total = \$8826**). **Yr 4:** 1 PhD student (Kristensen, @ \$4002.10) (**total = \$4002.10**).

**TRAVEL AND SUBSISTENCE COSTS**

Travel to Utah is key to the work: Promontory Point is located there, the UMNH holds large Steward collections in Salt Lake City, and materials from new Promontory excavations are being held at Brigham Young University. Fieldwork requires team/student presence in Utah. Many artifacts are highly significant cultural properties made of animal and plant products, with specific curatorial needs. Moving these across the U.S. border would require many federal, state or provincial, and institutional approvals—time consuming processes with uncertain outcomes. Our strategy is to move team members and students to collections and to have analytical procedures for artifacts remain within national borders. To allow flexibility in deploying team members, where there is more than one trip per year, trips may be taken by the same or different individuals, as circumstances require.

***Team Travel for Research Purposes (Foreign) (\$23,200 over 4 years)***

•**Yr 1:** *Analysis of Promontory Collections, Team (\$2760)*: 2 trips for team members (flights to Salt Lake City (\$700/person, 5 days accommodation (\$100/night at U Utah Guest House) and per diems @ \$180 (= \$1380/trip); *Archival Research, Team (\$1900)*: Travel to University of Illinois-Champaign to study Steward's Promontory field records (flight @ \$1100, accommodation, per diem, vehicle rental [\$800]); *Archaeological Fieldwork (\$2400)*: Field camp to support excavations in Promontory Caves 1 and 2 and survey of adjacent areas (University of Alberta vehicle rental @ \$60/day plus gasoline costs for 15 days/yr (\$1500) for economical transport of personnel and field equipment), food/accommodation costs 4 days travel to and from Utah (per diem @ CDN\$45/person for 2 [\$180], motel @ \$220 = \$400), plus camping/groceries for 1 team member @ \$500). [**Yr 1 Total \$7060**]

•**Yr 2:** *Analysis of Promontory Collections, 2 trips (\$2760 as in Yr 1)*; *Archaeological Fieldwork (\$2400 as in Yr 1)*; *First Nations Workshop UMNH (\$7200 Total)*: A 2-day gathering of Dene, Navajo, and Numic experts to evaluate Promontory clothing. In recorded sessions, participants will examine artifacts, use vocabulary, and relate relevant oral traditions. Mileage, accommodation & subsistence for Native American participants; flights, accommodation and subsistence for Canadian participants, 8 persons, with an average cost of \$900/person **\$7200 (2 Team/6 First Nations)**. [**Yr 2 Total \$12,360**]

•**Yr 3:** *Analysis of Promontory Collections, 1 trip (\$1380 costs as in Yr 1)*; *Archaeological Fieldwork (\$2400 as in Yr 1)*; [**Yr 3 Total \$3780**].

***Team Travel for Communication Purposes, Foreign (\$10,800)***

We will communicate results at US conferences (*Plains Anthropological Society, Great Basin Anthropological Society*) with one **Yr 1 trip @ \$1200**, **3 Yr 2 trips = \$3600**; **1 Yr 3 trip @ \$1200**; and a **Yr 4 Society for American Archaeology** symposium, 4 trips (**@ \$1200 = 4800**).

**Team Travel for Research, Canada (\$4500 Total):** **Yr 1** Travel to Yellowknife and Mackenzie Mountains for collections research/Kristensen's research (flight, accom., per diem @ \$2500), and (**\$1500** mileage and accommodation, trips to Glenbow Museum[archival records], Tsuu T'ina and Cold Lake First Nations. **Year 2, \$500** trips to Tsuu T'ina and Cold Lake First Nations. **No Yr 3-4 costs.**

***Team Travel for Communication Purposes, Canada (3,600)***

Presentations at the Canadian Archaeological Association (CAA) and Dene Language Conference (in Canada) (3 trips in each of **Years 1, 2 & 4 @ \$1200/trip = \$3600**).

***Student Travel for Research Purposes, Foreign (\$13,375)***

*Analysis of Promontory Collections, Students (\$10,225 total):* **Year 1**, 2 trips to Salt Lake City/Provo (flights @ \$700; accommodations 14 days @ \$100/day; per diems @ \$45; ground transportation at \$350/week = **\$4130**); **Year 2**, 2 trips @ same costs (**\$4130**); **Year 3**, 1 trip @ **\$1965**. *Student Fieldwork (\$3,150 total):* **Years 1-3:** Per Diem/accommodation costs travelling to and from Utah (per diem @ \$300/year; in field supplies/groceries, 3 students @\$700) = **\$1050/year**.

***Student Travel for Communication Purposes, Foreign (7,200)***

**Years 1-3**, one student attendance at US regional conference, @ \$1200 = \$3600); **Year 4**, *Society for American Archaeology* symposium, 3 student attendances (@ 1200 = \$3600).

***Student Travel for Research, Canada (\$7500 Total):*** **Year 1**, Flights and accommodation for Reilly and Kristensen to Yellowknife/Mackenzie Mountains (@\$2500/trip= **\$5000**); travel for Reilly, ethnoarchaeological research at Watson Lake, B.C. and Dillon, Saskatchewan **\$1500**. **Year 2**, travel to Royal Saskatchewan Museum, ethnoarchaeological research, Reilly (**\$1000**).

***Student Travel for Communication Purposes, Canada (\$4,200)***

**Yr 1**, 1 student attendance, CAA @ **\$1200**; **Yr 2**, 1 student to Calgary's Chacmool conference (@ **\$600**), **Yr 3**, 1 student to CAA, 1 to Chacmool (**\$1800**); **Yr 4**, 1 student to Chacmool (**\$600**).

**OTHER EXPENSES**

***Professional/Technical Services (\$50,440 Total):*** Key testing of temporal trends for moccasins requires valid sample sizes and refined dating of anthropogenic layers in Promontory Phase deposits. We require 40 additional AMS dates; Oxford large project research rate of £300 (CDN \$486 @ 1.62/sample, **Year 1**, \$7290, **Year 2** \$7290, **Year 3** 4860 = **\$19,440**). TOF-LA-ICP-MS offers a precise, essentially non-destructive alternative for ceramic analysis. *Institute for Integrated Research in Materials, Environments, and Society* analyses average \$50/sample x 120, **Yr 1**, \$2500, **Yr 2** \$2500, **Yr 3** \$1000 = **\$6000**; 200 sherd thin sections at \$18/sample (**Yr 1**, \$1800, **Yr 2** \$900, **Yr 3** \$900 = **\$3600**). Cost share with Shapiro of aDNA analyses, not commercially available for 30 samples, \$3000 for **Yrs 1-3** = **\$9000**. Obsidian sourcing, Geochemical Research Laboratory at a standard rate of \$30/sample x 80, **Yr 1**, \$1200, **Yr 2** \$600, **Yr 3** \$600 = **\$2400**. *Desert Research Institute* plant identifications @ \$130/litre sample x 50 samples, **Yr 1**, \$2600, **Yr 2** \$2600, **Yr 3** \$1300 = **\$6500**. Cartography, artifact drawing for reports will require **Yr 1**, \$1000, **Yr 2** \$500, **Yr 3** \$500, **Yr 4** \$1500 = **\$3500**.

***Supplies (\$13,190 Total):*** Protective clothing for hazardous cave dust and aDNA protocols, **Yrs 1-3** @ \$1000/yr = **\$3000**); spatial analytical software and high resolution spatial data (**Yr 1**, \$2000) plus ESRI GIS renewals (**Yrs 1-4** @ \$460/year = **\$3840**); eligible project office costs (forms, long distance calls, printer supplies, sample shipping, lab books, posters) **Yr 1**, \$1250, **Yr 2** \$900, **Yr 3** \$900, **Yr 4** \$700 = **\$3750**; CILLDI events (sewing, hideworking materials) **Yr 1**, \$1800, **Yr 2** \$400, **Yr 3** \$400 = **\$2600**.

**OTHER**

***Helicopter Charter (Yr 1, \$9,600 total):*** We lost 36 work hours/day in 2011 to foot transit; helicopter support will let us camp near the caves, to maximize research time. Charters are \$1200/hr, with 4 hr minimum charges, return. Charter would also be used for photography and to plan survey strategies.

***Landowner Field Camp Support (\$1000/yr x 3 yrs (1-3) = \$3000):*** The caves are on a sheep/cattle ranch in an arid environment. Our fieldwork impacts lambing operations; foot/ATV traffic affects range conditions. The research *cannot* occur without the landowner's sanction and presence. He provides camping facilities, gate access for visiting scientists, and ATV support to our activities (field gear and sediment samples). The \$1000/year budgeted for three years defrays his real expenses in this connection.

***Research Subject Fees (\$1000 x 2 [yrs 1, 2], \$800 yr 3, 400 yr 4 = \$3200):*** @ \$200/day/person) to recompense First Nations artisans taking part in a UMNH session on Promontory clothing, or in CILLDI sessions. We will interview the landowner re: his family history in protecting the caves since the 1930s.

## Funds from Other Sources

You must include all other sources of funding for the proposed research. Indicate whether these funds have been confirmed or not. Where applicable, include (a) the partners' material contributions (e.g. cash and in-kind), and (b) funds you have requested from other sources for proposed research related to this application.

Full organization name Contribution type	Confirmed	Year 1 Year 5	Year 2	Year 3	Year 4
Laboratory of Molecular Evolution, Pennsylvania State University	<input checked="" type="checkbox"/>	6,500	6,500	0	0
In Kind		0			
Office of Public Archaeology, Brigham Young University	<input checked="" type="checkbox"/>	5,000	5,000	2,500	0
In Kind		0			
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
<b>Total funds from other sources</b>		11,500	11,500	2,500	0
		0			

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB

Family name, Given name

IVES, John

**Suggested Assessors** - List up to 3 Canadian or foreign specialists whom SSHRC may ask to assess your proposal. List keywords that best describe the assessor's areas of research expertise. Please refer to the Suggested Assessors section of the detailed instructions for more information on conflicts of interest.

Family name <b>Meyer</b>		Given name <b>David</b>		Initials	Title <b>Professor</b>
Org. code	Full organization name <b>University of Saskatchewan</b>		Keywords <b>Northern Plains Archaeology; Ethnohistory; Pottery; Hunter-Gatherer Ethnology</b>		
Department/Division name <b>Archaeology and Anthropology</b>			Address <b>55 Campus Drive</b>		
Country code		Area code	Number	Extension	City/Municipality
					<b>Saskatoon</b>
Telephone number		<b>11</b>	<b>306</b>	<b>966-4178</b>	Prov./State <b>SK</b>
Fax number		<b>11</b>	<b>306</b>	<b>966-5640</b>	Postal/Zip code <b>S7N5B1</b>
Country <b>CANADA</b>					
E-mail <b>david.meyer@usask.ca</b>					
Family name <b>Welch</b>		Given name <b>John</b>		Initials <b>R.</b>	Title <b>Dr.</b>
Org. code	Full organization name <b>Simon Fraser University</b>		Keywords <b>Apache Archaeology; Apache Ethnohistory; Indigenous Archaeology</b>		
Department/Division name <b>Archaeology</b>			Address <b>Department of Archaeology 8888 University Drive</b>		
Country code		Area code	Number	Extension	City/Municipality
					<b>Burnaby</b>
Telephone number		<b>11</b>	<b>778</b>	<b>782-6726</b>	Prov./State <b>BC</b>
Fax number		<b>11</b>	<b>778</b>	<b>782-5666</b>	Postal/Zip code <b>V5A1S6</b>
Country <b>CANADA</b>					
E-mail <b>welch@sfu.ca</b>					
Family name <b>Spielmann</b>		Given name <b>Katherine</b>		Initials <b>A.</b>	Title <b>Professor</b>
Org. code	Full organization name <b>Arizona State University</b>		Keywords <b>Archaeology; Bioarchaeology; Ecology; Economic Anthropology; Exchange and Social Networks; Political Organization; Social Organization</b>		
Department/Division name <b>Anthropology</b>			Address <b>School of Human Evol. &amp; Social Change PO Box 872402</b>		
Country code		Area code	Number	Extension	City/Municipality
					<b>Tempe</b>
Telephone number		<b>011</b>	<b>480</b>	<b>965-5138</b>	Prov./State <b>AZ</b>
Fax number		<b>011</b>	<b>480</b>	<b>965-7671</b>	Postal/Zip code <b>852872402</b>
Country <b>UNITED STATES</b>					
E-mail <b>kate.spielmann@asu.edu</b>					

Personal information will be stored in the Personal Information Bank for the appropriate program.

Application WEB

**Request of Assessor Exclusion**

We request that SSHRC consider assessor exclusions for Professor (Emeritus) R. G. Matson, University of British Columbia, Dr. Martin P. R. Magne (Director, Western and Northern Service Center, Parks Canada), and Dr. Herbert Maschner, Idaho State University. Matson and Magne are co-authors of a work (Matson, R. G. and Martin P. R. Magne. 2007. *Athapaskan Migrations. The Archaeology of Eagle Lake, British Columbia*. University of Arizona Press) that touches on a number of themes in Dene prehistory. Ives reviewed this work (*Canadian Journal of Archaeology/Journal Canadien d'Archéologie* 32: 153–159 [2008]). Matson and Magne's work expresses some different viewpoints concerning Apachean and Dene migration, with competing hypotheses very strongly endorsed by Maschner. These factors might affect an unbiased review of the proposal.



## APPENDIX A Environmental Impact

If you have selected "Yes" to either question a) or b) under Environmental Impact on page 1 of the printed form, Appendices A and B must be completed. Include all activities whether they will take place in Canada or abroad. This information will assist SSHRC in determining whether a screening is required under the *Canadian Environmental Assessment Act* (Please refer to the detailed instructions for more information.)

Applicant family name <b>IVES</b>	Applicant given name <b>John</b>	Initials <b>W.</b>
Name of organization <b>University of Alberta</b>		
Application title <b>Apachean Origins: New Explorations of the Canadian Heritage of A. D. 13th Century Dene at Promontory Point, Utah</b>		
Name of other participating organizations (if applicable) <b>University of Alberta, Oxford University, Brigham Young University, Southern Methodist University, Pennsylvania State University, Desert Research Institute, Weber State College</b>		
<b>Name of Location</b> (Please complete an additional copy of Appendix A for EACH location at which research will be undertaken.) <b>Promontory Caves 1 &amp; 2, Promontory Point, Great Salt Lake, Utah</b>		
<b>Main characteristics of the location</b> (i.e., physical description, coordinates) <b>These are the two principal caves occupied during Promontory Phase times, and they have both yielded extensive suites of perishable and non-perishable artifacts.</b>		
<b>Name of principal activity</b> (Please complete a copy of Appendix A for EACH principal activity at a given location: Location X - Activity 1, Location X - Activity 2, etc.; Location Y - Activity 1, Location Y - Activity 2, etc.) <b>Archaeological Excavations in Promontory Caves 1 &amp; 2</b>		
<b>Activity components</b> (Please complete a copy of Appendix A for EACH activity component: Location X - Activity 1 - Component 1, Location X - Act. 1 - Comp. 2, etc.; Location X - Act. 2 - Comp. 1; Location X - Act. 2 - Comp. 2, etc.; Location Y - Act. 1 - Comp. 1, etc.) <b>With collaboration of several team participations, we will undertake strategic archaeological excavations in these two Promontory Caves. The excavations will be as small as possible, and will not exceed a 2 x 2 meter unit in each cave.</b>		
<b>Environmental elements affected</b> <b>Excavations will take place within Promontory Caves 1 &amp; 2; there is no vegetation. Sediments will be excavated with hand tools; sediments will be retained for further laboratory processing at Brigham Young University, the Desert Research Institute and the University of Alberta.</b>		
<b>Description of effects</b> <b>We will continue excavating small units adjoining Steward's 1930s units in each cave, so that we can apply modern techniques in assessing stratigraphy, and apply suitable sampling protocols for palaeoenvironmental studies and recovery of ancient human DNA.</b>		
<b>Mitigation measures</b> <b>Excavations will continue to proceed only with the permission of land owner Mr. George Chournos; we will meet any conditions he provides including backfilling units.</b>		
<b>NOTE:</b> There is a potential to generate a large number of Appendix A pages, particularly if the research will take place in several locations, with a number of principle activities and activity components at each location. <b>Please ensure the additional sheets of Appendix A are numbered consecutively in the space provided in the upper right corner of the form.</b>		

## APPENDIX B

### **Canadian Environmental Assessment Act**

### **Pre-Screening Checklist**

If you have selected "Yes" to either question a) or b) under Environmental Impact on page 1 of the printed form, Appendices A and B must be completed. Include all activities whether they will take place in Canada or abroad. This information will assist SSHRC in determining whether a screening is required under the *Canadian Environmental Assessment Act* (Please refer to the detailed instructions for more information.)

Applicant family name <b>IVES</b>	Applicant given name <b>John</b>	Initial(s) <b>W.</b>
Name of organization <b>University of Alberta</b>		
<b>Applicants are responsible for verifying whether permits are required for any of the activities listed below. Please indicate yes (Y), no (N) or unknown (U) by selecting the appropriate box for EACH of the listed activities.</b>		
<b>Y</b>	<b>N</b>	<b>U</b>
<b>DESCRIPTION OF ACTIVITY</b>		
<b>Part 1 - Determination of Physical Work under the CEAA</b>		
<input checked="" type="checkbox"/>	Does any phase of the proposal involve the <b>construction, operation, modification, decommissioning, abandonment or other activity</b> in relation to a built structure that has a fixed location and is not intended to be moved frequently?	
<b>Part 2 - Determination of Assessable Activities under the CEAA</b>		
<input checked="" type="checkbox"/>	Activity takes place in a National Park or National Nature Reserve in Canada	
<input checked="" type="checkbox"/>	Activity takes place on First Nation lands	
<input checked="" type="checkbox"/>	Activity takes place in the North (Yukon, Nunavut, or the Northwest Territories)	
<input checked="" type="checkbox"/>	Activity takes place in or within 30 metres of the right-of-way of a power line, a natural gas line, or a railway line	
<input checked="" type="checkbox"/>	Activity takes place in or adjacent to a water body, resulting in harmful alteration, disruption or destruction of fish habitat (including damaging or removal of aquatic vegetation)	
<input checked="" type="checkbox"/>	Destruction of fish other than by fishing	
<input checked="" type="checkbox"/>	Sampling or prospecting for minerals	
<input checked="" type="checkbox"/>	Disposal of a prescribed nuclear substance other than in a laboratory equipped for such disposal	
<input checked="" type="checkbox"/>	Deposit of a deleterious or other substance into the environment (in the earth, air, or water)	
<input checked="" type="checkbox"/>	Any kind of remediation of contaminated land	
<input checked="" type="checkbox"/>	The deposit of oil, wastes or any other substances harmful to migratory birds in waters or in areas frequented by migratory birds	
<input checked="" type="checkbox"/>	Killing or removal of migratory birds, their nests, eggs, or carcasses or other physical activities that may require a permit or other authorisation under the <i>Migratory Birds Regulations</i> or <i>Migratory Bird Sanctuary Regulations</i>	
<input checked="" type="checkbox"/>	The removal or damaging of vegetation, the carrying on of agricultural activities or the disturbance or removal of soil in a wildlife area that requires a permit under section 4 of the <i>Wildlife Area Regulations</i> under the <i>Canada Wildlife Act</i>	
<input checked="" type="checkbox"/>	Physical activities that are carried on in Canada and that are intended to threaten the continued existence of a biological population in an ecodistrict, either directly or through the alteration of its habitat	
<input checked="" type="checkbox"/>	Establishment or operation of a field camp in a single location that will be used for 200 person-days or more within a calendar year	
<input checked="" type="checkbox"/>	Seismic surveying involving more than 50 kg of chemical explosive in a single blast; or marine or freshwater seismic surveying, if during the survey the air pressure measured at a distance of one metre from the source would be greater than 275.79 kPa (40 lbs/sq in)	

Personal information will be stored in the Personal Information Bank for the appropriate program.

Appendix B WEB

**APPENDIX B (Continued)**  
***Canadian Environmental Assessment Act***  
**Pre-Screening Checklist**

Family name, Given name

IVES, John

**Are any provincial or federal authorizations, permits, or licences required to undertake any activity for any phase of the proposal? If so, list them here:**


**Do not photocopy this page.**

<b>Internal use</b>	CID (if known)
874686	18614

## Identification

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

### Name

Family name	Given name	Initials	Title
IVES	John	W.	Dr.

### Citizenship - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input checked="" type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
				<input type="radio"/> Yes <input type="radio"/> No

### Statistical and Administrative Information

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1952	<input type="radio"/> F <input checked="" type="radio"/> M	T6W1J2	<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

## Contact Information

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	780	248-2082			780	492-0139	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	780	492-5273					
Primary E-mail jives@ualberta.ca							
Secondary E-mail							

**Checked**

Web CV

2011/10/07

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**

**Do not photocopy this page.**

Family name, Given name

IVES, John

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address			Address		
			Department of Anthropology		
			University of Alberta		
			14-15 H. M. Tory		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
			Edmonton	AB	T6G2H4
Country			Country CANADA		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
			922 Blackmud Creek Crescent		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
			Edmonton	AB	T6W1J2
Country			Country CANADA		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number			
		Country code	Area code	Number	Extension
Temporary E-mail					

Family name, Given name

IVES, John

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	300	Multiculturalism and ethnic studies
2	240	Indigenous peoples
3	100	Arts and culture

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>50000 BC AD</p> <p><input checked="" type="radio"/> <input type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>1920 BC AD</p> <p><input type="radio"/> <input checked="" type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2	6200	East Asia
3	1130	Western Canada

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./ State
1	1100	CANADA	
2	1200	UNITED STATES	
3	6201	CHINA	
4			
5			

Family name, Given name

IVES, John

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Exec Dir, Inst of Prairie Archaeology				2008/3
Org. code	Full organization name			
1480111	University of Alberta			
Department/Division name				
Anthropology				
Position type	<input checked="" type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Full Professor			2007	
Org. code	Full organization name			
1480111	University of Alberta			
Department/Division name				
Anthropology				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Manager & Provincial Archaeologist			2001	2007
Org. code	Full organization name			
1	Alberta Community Development			
Department/division name				
Heritage Resource Management Branch (Archaeology & History)				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Assistant Director			1990	2001
Org. code	Full organization name			
1	Royal Alberta Museum/Provincial Museum of Alberta			
Department/Division name				
Archaeology and Ethnology				

Family name, Given name

IVES, John

## Work Experience (cont'd)

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Director		1986	1990
Org. code	Full organization name		
1	Alberta Culture		
Department/Division name			
Archaeological Survey of Alberta			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Head of Research		1985	1986
Org. code	Full organization name		
1	Alberta Culture		
Department/Division name			
Archaeological Survey of Alberta			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Boreal Forest Archaeologist		1979	1985
Org. code	Full organization name		
1	Alberta Culture		
Department/Division name			
Archaeological Survey of Alberta			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Boreal Forest Archaeologist		1979	1985
Org. code	Full organization name		
1	Archaeological Survey of Alberta		
Department/Division name			
Alberta Culture			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			



IVES, John

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1977/09		1985/11
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
9938101	University of Michigan, Ann Arbor			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1975/09		1977/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1480111	University of Alberta			
Country	CANADA			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1970/09		1974/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1470111	University of Saskatchewan			
Country	CANADA			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

IVES, John

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Non-Academic Prize	Premier's Award (Silver), Black Dragon Exhibition			2000
Non-Academic Prize	Premier's Award (Gold), Aboriginal Peoples Gallery			1998
Academic Prize	Horace H. Rackham Distinguished Dissertation	UNITED STATES		1985
Fellowship	SSHRC Doctoral Fellowship		12	\$6,000 1978
Graduate Scholarship	University of Michigan, Tuition Scholarship		12	\$3,000 1978
Fellowship	Canada Council Doctoral Fellowship		24	\$6,000 1977

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Plains and Subarctic prehistory; Athapaskan and Algonquian social structure and economy; migration; prehistory of northeast Asia; public archaeology and resource management; issues in repatriation and reburial; ethnohistory; palaeoecology

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60424	Paleoanthropology, Ethnoarchaeology, Paleoethnology	
2	60418	Material Culture (incl. burials)	
3	60414	Hunters and Gatherers	
4	60432	Trade and Trade Routes, Culture Contact, Cultural Relations	
5	60428	Settlement Patterns, Land Use, Paleodemography	

Family name, Given name

IVES, John

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
3010325	Social Sciences and Humanities Research Council of Canada	2010	\$52,592
Role	Applicant	Completion status	<input type="checkbox"/> Complete
Project title	Apachean Origins: Exploring the Canadian Heritage of A. D. 13th Century Dene at Promontory Point, Utah		
Applicant's family name	Applicant's given name	Initials	
Ives	John	W.	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Historic Resources Management Branch, Alberta Culture and Community Spirit	2009	\$4,500
Role	Applicant	Completion status	<input checked="" type="checkbox"/> Complete
Project title	Radiocarbon Dating of Bodo Archaeological Site, Alberta		
Applicant's family name	Applicant's given name	Initials	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Historic Resources Management Branch, Alberta Culture and Community Spirit	2008	\$2,500
Role	Applicant	Completion status	<input checked="" type="checkbox"/> Complete
Project title	AMS Radiocarbon Dating of Promontory Moccasins, Utah		
Applicant's family name	Applicant's given name	Initials	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	U. S. National Science Foundation	2008	\$825,000
Role	Collaborator	Completion status	<input type="checkbox"/> Complete
Project title	Dynamics of Hunter-Gatherer Language Change		
Applicant's family name	Applicant's given name	Initials	
Bowern	Claire		

Family name, Given name

IVES, John

## Funded Research (cont'd)

Org. code 1	Full name of funding organization University of Alberta	Year awarded (yyyy) 2008	Total amount (CAN\$) \$41,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Enhancement Fund for the Future			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 1	Full name of funding organization Historic Resources Management Branch, Alberta Culture and Community Spirit	Year awarded (yyyy) 2008	Total amount (CAN\$) \$3,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Radiocarbon Dating of Bodo Archaeological Site, Alberta			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	
Org. code 1	Full name of funding organization Feasibility Study Grant, Canadian Museums Association	Year awarded (yyyy) 1992	Total amount (CAN\$) \$42,000
Role Co-applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Bridge of the Black Dragon			
Applicant's family name McGillivray		Applicant's given name Bruce	
Applicant's family name		Applicant's given name	
Org. code 1	Full name of funding organization Short Term Study Grant, Canadian Museums Association	Year awarded (yyyy) 1992	Total amount (CAN\$) \$3,500
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Exhibition Feasibility Study, Institute of Ethnology and Anthropology, Russian Academy of Sciences, Moscow			
Applicant's family name		Applicant's given name	
Applicant's family name		Applicant's given name	

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

# 1. Research Contributions over the Last Six Years (\* = SSHRC-funded research)

## A. Refereed Contributions

- R Ives, J. W., E. J. Vajda and S. Rice. 2010. Dene-Yeneseian and Processes of Deep Change in Kin Terminologies. *Anthropological Papers of the University of Alaska*, Volume 5(1-2):223-256. Special Issue, *The Dene-Yeneseian Hypothesis*, ed. by J. Karie and B. Potter.
- R Ives, J. W. 2010. Dene-Yeneseian, Migration and Prehistory. *Anthropological Papers of the University of Alaska*, Volume 5 (1-2):324-334. Special Issue, *The Dene-Yeneseian Hypothesis*, ed. by J. Kari and B. Potter.
- R Ives, J. W., 2006. 13,001 Years Ago—Human Beginnings in Alberta. In *Alberta Formed, Alberta Transformed*, Alberta's 2005 Centennial History Volume, ed. by M. Payne, D. Wetherell, and C. Cavanaugh, Volume 1, pp. 1-34. Calgary & Edmonton: University of Calgary and University of Alberta Presses.

## B. Other Refereed Contributions (Refereed Conference Presentations)

- R Ives, J. W. 2011. Resolving the Promontory Culture Enigma. 76th Annual Meeting of the Society for American Archaeology, March 29-April 3, 2011, Sacramento. For the Symposium *Advances in Great Basin and Southwestern Archaeology: Papers in Honor of Don D. Fowler*. (Invited.)
- R Eiselt, S. and J. W. Ives, J. W. 2011. Kinship—the Unattended Dimension of Paleoindian Studies. 76th Annual Meeting of the Society for American Archaeology, March 30-April 3, Sacramento. For the Symposium *Questioning Assumptions: Celebrating the Work and Influence of John D. Speth*. (Invited.)
- R Ives, J. W. 2007. Three R's of Traditional Use Studies—Rights, Responsibilities, and Reliability. Fourth Interjurisdictional Symposium on Aboriginal Involvement in Resource Development (Canada). September 10-13, Edmonton. (Invited.)
- R Ives, J. W. 2007. Insights into the Apachean Transition from the Subarctic Using Ceramic and Food Term Etymologies. Ceramics, Mobility and Interactions in Late Prehistory, session organized by Dr. Margaret Beck, UCLA. 72nd Annual Meeting of the Society for American Archaeology, Austin, Texas. (Invited.)
- R Ives, J. W. and S. Rice. 2006. "Correspondences in Archaeological, Linguistic and Genetic Evidence for Apachean History." Poster Session, *Languages and Genes, An Interdisciplinary Conference*, University of California, Santa Barbara, September 6-10, 2006, (Organizers Bernard Comrie and Carol Genetti, Max Planck Institute/Department of Linguistics, University of California, Santa Barbara).

## C. Non-refereed Contributions

- Ives, J. W. "Living in the Moment—Northern Alberta Assemblages Reflecting Instants in Time." 43rd Annual Meeting of the Canadian Archaeological Association/Annual Meeting of the Archaeological Society of Alberta. April 29-May 1, 2010, Calgary, Alberta.
- Ives, J. W. 2010. "Thinking Dene Thoughts About the Earliest Human Presence in the New World." Dynamics of Hunter-Gatherer Language Change, U. S. NSF Project Workshop, University of Arizona, Tucson, March 5-7, 2010.
- Ives, J. W. 2009. "Holes in our Stories. Reflections on Archaeological and Linguistic Information for Apachean Migration from the Canadian Subarctic." Dene Migration Workshop, Tsuut'ina First Nation/University of Alberta (Calgary Centre). September 25-27, 2009.

- Ives, J. W. 2009. "Archaeological, Linguistic and Genetic Evidence for Apachean Migration from the Canadian Subarctic." *Dynamics of Hunter-Gatherer Language Change*, U. S. NSF Project Workshop, Austin, Texas, March 26-28.
- Ives, J. W. 2009. "Technological Thresholds and Dene Language History." *Dynamics of Hunter-Gatherer Language Change*, U. S. NSF Project Workshop, Austin, Texas, March 26-28.
- Ives, J. W. 2008. Review of *Athapaskan Migrations*. The Archaeology of Eagle Lake, British Columbia, by R. G. Matson and Martin P. R. Magne. University of Arizona Press. *Canadian Journal of Archaeology* 32:153-159.
- Ives, J. W. 2008. Discussant Remarks, Ways of Becoming: Dynamic Processes in the Creation of Athapaskan Identities and Landscapes, 73rd Annual meeting of the Society for American Archaeology, Vancouver, British Columbia, March 26-30.
- Ives, J. W. 2008. "Three Collaborative Contexts in Which Dene-Yeneseic Connections Can be Assessed." The Dene-Yeneseic Symposium, 35th Annual Meeting, Alaska Anthropological Association, Feb. 27-Mar. 1, Anchorage.
- Ives, J. W. 2007. "A Hell Gap Assemblage from the Peace River Prairie/Parkland Isolate, Northwestern Alberta." 65<sup>th</sup> Plains Anthropological Conference (Rapid City, South Dakota), 10-13 October.
- Ives, J. W. 2006. "Terms of Engagement—Themes in Heritage Consultation with Alberta First Nations." 39<sup>th</sup> Annual Chacmool Conference, *Decolonizing Archaeology*. November 11-14, University of Calgary.
- Ives, J. W. 2006. "A Mile in These Shoes—How Apachean Ancestors Arrived in the American Southwest." Yukon Science Institute public lectures; presentations at the Beringia Centre (White Horse) and Yukon schools, November 5-8.
- Ives, J. W. 2006. "Wayward Geese, Steppe Wolves, and Forest Tigers—Ethnogenesis, Language and Technological Thresholds in Athapaskan and Altaic Contexts." Dene Language Conference, Yellowknife, NWT, Canada, June 12-15.
- Ives, J. W. and D. Bereziuk, 2006. "Large Stemmed Points from the Peace River Country, Northwestern, Alberta." 39th Annual Canadian Archaeological Association Meetings, Toronto, Ontario, May 25-27.

#### D. Forthcoming Contributions

- R\*** Ives, J. W. **Submitted.** Resolving the Promontory Culture Enigma. *Advances in Great Basin and Southwestern Archaeology: Essays in Honor of Don Fowler*, ed. by J. C. Janetski and N. Parezo. University of Utah Press.
- R\*** Ives, J. W. **Submitted.** A Contextual Approach to Apachean Origins. *Canadian Journal of Archaeology*.
- R** Ives, J. W. **Submitted.** Moving Toward Repatriation. In "*I'm Coming Home*". *Blackfoot Repatriation of Sacred Material*, ed. by Gerald Conaty. Athabasca University Press.
- R** Ives, J. W. **Revised and Submitted.** The Human History of the Birch Mountains, Northeastern Alberta. Chapter for a volume on *Oil Sands Archaeology*, ed. by B. M. Ronaghan, Archaeological Survey of Alberta, for University of Alberta Press.

#### 2. Other Research Contributions

Executive Director, Institute of Prairie Archaeology, Faculty of Arts, University of Alberta, a multifaceted role in which I foster outreach activities to not-for-Profit organizations (e.g.,

*Archaeological Society of Alberta*; *Association of Consulting Archaeologists in Alberta*), continue involvement with the ever-popular Royal Alberta Museum of Alberta *Time Travellers* International Lecture Series), build relationships with Treaty 6, 7, 8 and First Nations communities, oversee, teach and report upon the Department of Anthropology's archaeological field school at Ahai-Mneh (FiPp-33) (managing relationships with Paul First Nation, Transalta and the *Rangeland Research Institute*, Faculty of Agriculture, Land and Environmental Sciences), serve as a University of Alberta Senator and support initiatives such as *USchool*, bringing inner city children and parents to the University—familiarization designed to help make University education an attainable goal. **(2008-Present)**

Workshop Co-Organizer. Dene Migration Workshop. A meeting of Canadian, American and European scholars with Navajo, Apache, various Canadian Dene community representatives. With Bruce Starlight, *Tsuut'ina Gunaha Institute* and Sally Rice, Department of Linguistics. *Tsuut'ina First Nation/University of Alberta (Calgary Centre)*. **(September 25-27, 2009)**

External Committee Member, Unit Review of George Frison Institute of Archaeology, University of Wyoming. **(February-March 2009)**

Design, Drafting, and Coordination through University of Alberta Governance of Proposal to Create an *Institute of Prairie Archaeology*, University of Alberta, approved by Provost. **(July 2007 through May 18, 2008)**

Ministry Team Lead, Cross-ministry drafting and coordinating committees for the *Government of Alberta's First Nations Consultation Policy on Land Management and Resource Development* and the *Government of Alberta's First Nations Consultation Guidelines on Land Management and Resource Development* (2006, building upon my previous experience with Alberta's repatriation legislation).

### 3. Most Significant Career Research Contributions

- R Ives, J. W. 1990. *A Theory of Northern Athapaskan Prehistory*. Boulder/Calgary: Westview Press & University of Calgary Press.  
A Canadian-American co-publication based on an award-winning University of Michigan dissertation, on the impact of elementary kin structures on band societies.
- R Ives, J. W. 1998. Developmental processes in the Pre-Contact History of Athapaskan, Algonquian and Numic kin systems. In *Transformations of Kinship, the Round Table: Dravidian, Iroquois and Crow-Omaha Kinship Systems*, ed. by Maurice Godelier Thomas R. Trautmann, and Franklin Tjon Sie Fat, pp. 94-139. Washington and London: Smithsonian Institution Press.  
A volume that helped restore kinship to its pre-eminent role in anthropological theory.
- R Ives, J. W. 2010. Dene-Yeneseian, Migration and Prehistory. *Anthropological Papers of the University of Alaska*, Volume 5 (1-2):324-334. Special Issue, *The Dene-Yeneseian Hypothesis*, ed. by J. Kari and B. Potter.  
Part of a volume that established the reality of a Dene-Yeniseian language family.
- R Peck, T. R. and J. W. Ives. 2001. Late Side-Notched Projectile Points in the Northwestern Plains. *Plains Anthropologist* 46 (176): 163-193.  
A re-writing (with graduate student) of late period northern Plains projectile typology.
- R Ives, J. W., 2006. 13,001 Years Ago—Human Beginnings in Alberta. In *Alberta Formed, Alberta Transformed*, Alberta's 2005 Centennial History Volume, ed. by Michael Payne et al. Calgary & Edmonton: University of Calgary/Alberta Presses.  
The opening paper in a unique centennial volume in planning for a decade.

### 4. Career Interruptions and Special Circumstances

I assumed my first academic appointment in July 2007, after previously serving in various senior management roles with the Government of Alberta.

## 5. Contributions to Training over the Last Six Years

### PhD

- T. Kristensen. Research on the relationship between base camps at lower altitude fish lakes and perishable artifacts found at high altitude ice patch loci in the NWT. (Supervisor, 2011)
- K. Biittner. *Characterization of Middle and Later Stone Age Lithic Artifacts from Two Rockshelter Sites in Iringa Region, Southern Tanzania*. (Defence Examiner, 5 May 2011)
- V. Bowyer. *Caribou Hunting at Ice Patches: Seasonal Mobility and Long-term Land-Use in the Southwest Yukon*. (Committee Member, successful defence, 2 April 2011)
- J. Taylor-Holling. Research into Selkirk Composite ceramics in northwestern Ontario. (Committee Member, Candidacy Examiner, 2009).
- M. Caldwell. Research concerning prehistoric and historic Tla'ammen fish trap technology, British Columbia. (Committee Member, from 2009; successful Candidacy 22 April 2010).
- M. Billinger. 2006. *Beyond the Racial Paradigm: New Perspectives on Human Biological Variation*. Department of Anthropology, University of Alberta. (Defence Examiner).

### MA

- A. Reilly. Hide preparation technology in the Promontory Cave assemblages; ethnographic and archaeological study of hide preparation artifacts in western Canada. (Supervisor 2011)
- R. Graham. Research into the contribution of horticultural products to diet and society in northern Plains bison hunting cultures. (Supervisor 2011)
- G. Yanicki. Research into the Old Man's Playing Field and the nature of prehistoric social interaction at the Continental Divide, southwestern Alberta. (Supervisor, 2009).
- P. Stewart. Swan River Chert and its alteration through heat treatment. (Supervisor, 2009).
- Q. Bender. *The Nature and Context of Agate Basin Archaeology in Alberta and Saskatchewan, Canada*. (Committee Member, 2009, through completion 21 July 2010).

**Student Involvement in Research:** **T. Kristensen's** work that will draw directly on my experience with Subarctic prehistory and Dene economies; his NWT research should allow for effective interplay with G. Yanicki and especially A. Reilly; **G. Yanicki** has taken part in data base and collections research connected with the Promontory collections, took part in April 2011 field excavations at Promontory Cave 1, and has been accepted for PhD work concerning Fremont-Promontory relationships contingent upon completion of his MA in late 2011; **A. Reilly** is developing research concerning hide production with existing and new Promontory collections, as well as ethnoarchaeological and distributional data (for artifacts such as chi-thos) in western Canada; **R. Graham** can develop a horticultural-Plains bison hunting interaction research focus concerning Fremont-Plains (including Apachean) interaction; former PhD student **Dr. M. Billinger** has co-authored several posters and presentations on the Promontory caves with me; we are currently completing research for a co-authored article "Moccasin Size and Population Structure of the A.D. 13<sup>th</sup> Century Promontory Cave Occupations" for submission to the *American Journal of Physical Anthropology*. I worked intensively with undergraduate and graduate students on contributions arising from archaeological field school research (publications in our new student journal, *Diversipede*, and contributions to the Archaeological Society of Alberta 2011 meetings). I plan to involve **Dr. V. Bowyer** in analyses of bison and sheep dung from Promontory Cave 1 deposits for indicators of seasonality.



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<b>Internal use</b>	CID (if known)
701720	

## Identification

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

### Name

Family name	Given name	Initials	Title
arkush	brooke	S.	Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian <input type="radio"/> Permanent resident since (yyyy/mm/dd) _____	<input checked="" type="radio"/> Other (country) <u>UNITED STATES</u>	Have you applied for permanent residency? <input type="radio"/> Yes <input checked="" type="radio"/> No
--------------------	---	--	--

### Statistical and Administrative Information

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1961	<input type="radio"/> F <input checked="" type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input type="radio"/> No

Full name used during previous contact, if different from above

## Contact Information

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	801	626-7202					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	801	626-8979					
Primary E-mail <b>barkush@weber.edu</b>							
Secondary E-mail							

**Checked**

Web CV

2011/10/06

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**

**Do not photocopy this page.**

Family name, Given name

arkush, brooke

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address 1208 University Circle			Address  		
Weber State University			 		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Ogden	UT	84408			
Country UNITED STATES			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address  			Address  		
City/Municipality	Prov./ State		City/Municipality	Prov./ State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number Country code    Area code    Number    Extension			
Temporary E-mail  					

Family name, Given name

arkush, brooke

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1		
2		
3		

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>7500 BC AD</p> <p><input checked="" type="radio"/> <input type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>1850 BC AD</p> <p><input type="radio"/> <input checked="" type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2		
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1			
2			
3			
4			
5			

Family name, Given name

arkush, brooke

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Full Professor				1990/7
Org. code	Full organization name			
9977108	Weber State University			
Department/Division name				
Anthropology and Sociology				
Position type	<input checked="" type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/Division name				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/division name				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/Division name				

Family name, Given name

arkush, brooke

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate	doctor of philosophy	1984/01		1989/08
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
9983104	University of California, Riverside			
Country UNITED STATES				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

arkush, brooke

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

western North American prehistory and colonial history; semi arid forager settlement and subsistence systems; communal big-game hunting

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60426	Prehistory	
2			
3			
4			
5			

## **1. Research Contributions over the Last Six Years**

**ARKUSH, Brooke S.**

### **A. Refereed Contributions**

- R** Arkush, Brooke S. 2011. Native Responses to European Intrusion: Cultural Persistence and Agency Among Mission Neophytes in Spanish Colonial Northern California. (In press, *Historical Archaeology* 45[4])

### **B. Other Refereed Contributions (Refereed Conference Presentations)**

- R** Arkush, Brooke S. 2005. Prehistoric Settlement Systems in Southeastern Idaho: A View from the Curlew Valley. Read at the 70<sup>th</sup> Annual Meeting of the Society for American Archaeology, Salt Lake City, Utah.

### **C. Non-refereed Contributions**

Arkush, Brooke S., and W. Sue Fairbanks. 2005. Review of "Prairie Ghost: Pronghorn and Human Interaction in Early America" by Richard E. McCabe, Bart W. O'Gara, and Henry M. Reeves. *The Journal of Wildlife Management* 69(4):1754-1756.

Arkush, Brooke S. 2006. Review of "Camels Back Cave" by Dave N. Schmitt and David B. Madsen (University of Utah Anthropological Paper No. 125). *Journal of California and Great Basin Anthropology* 26(2):109-111.

Arkush, Brooke S. 2008. The Archaeology of Standing Rock Overhang: A Long-Term Record of Bighorn Sheep Hunting and Processing in Southeastern Idaho. Ogden, Utah: *USDA Forest Service, Intermountain Region Heritage Report 3-06*.

Arkush, Brooke S. 2009. Review of "Ancient Peoples of the Great Basin and Colorado Plateau" by Steven R. Simms. *Idaho Archaeologist* 32(1):11-12.

Arkush, Brooke S. 2006. The Archaeology of Standing Rock Overhang: A Long-Term Record of Bighorn Sheep Hunting and Processing in Southeastern Idaho. Read at the 30th Biennial Great Basin Anthropological Conference, Las Vegas, Nevada.

Arkush, Brooke S. 2007. Recent Excavations at Trapper Cliff Shelter: A Riparian Zone Habitation Site in Cassia County, Southcentral Idaho. Read at the Eighth Biennial Rocky Mountain Anthropological Conference, Jackson, Wyoming.

Arkush, Brooke S. 2008. The Archaeology of Trapper Cliff Shelter: A Late Holocene Residential Base Camp in Cassia County, Southcentral Idaho. Read at the 31<sup>st</sup> Biennial Great Basin Anthropological Conference, Portland, Oregon.

Arkush, Brooke S. 2010. Native Responses to European Intrusion: Cultural Persistence and Agency Among Mission Neophytes in Spanish Colonial Northern California. Poster presented at the 44<sup>th</sup> Annual Meeting of the Society for California Archaeology, Riverside, California.

Arkush, Brooke S. 2010. Recent Excavations at 10-OA-275: A Big Game Processing Camp on the Curlew National Grassland, Southeastern Idaho. Read at the 32<sup>nd</sup> Biennial Great Basin Anthropological Conference, Layton, Utah.

#### **D. Forthcoming Contributions**

Arkush, Brooke S. The Archaeology of Trapper Cliff Shelter: A Late Holocene Residential Base Camp in Cassia County, Southcentral Idaho. To be submitted to the *USDA Forest Service, Intermountain Region Heritage Reports*.

Arkush, Brooke S. Communal Pronghorn Hunting in the Great Basin: What Have We Learned Over the Last 25 Years? In: *Firm Guidance From A Kind Soul: Essays in Honor of Philip J. Wilke, Mark Q. Sutton*, ed. *Pacific Coast Archaeological Society Quarterly*.

#### **2. Other Research Contributions**

Editorial Board Member, *Boise State University Monographs in Archaeology*, 2001 - 2005

Editorial Board Member, *Monographs in Idaho Archaeology and Ethnology*, 1995 - 2000

#### **3. Most Significant Career Research Contributions**

**R** Arkush, Brooke S. 1995. The Archaeology of CA-MNO-2122: A Study of Pre-Contact and Post-Contact Lifeways Among the Mono Basin Paiute. *University of California Anthropological Records* Vol. 31. Berkeley.  
A monograph concerning a major prehistoric and early historic Northern Paiute residential locality in eastcentral California.

Arkush, Brooke S. 1998. Archaeological Investigations at Mosquito Willie Rockshelter and Lower Lead Mine Hills Cave, Great Salt Lake Desert, Utah. *Coyote Press Archives of Great Basin Prehistory* No. 2. Salinas, California.  
A monograph concerning two important prehistoric residential sites located in the Blue Lake area along the Utah/Nevada border, where only a minimal amount of



research had previously occurred.

- R** Arkush, Brooke S. 1999. Recent Small-Scale Excavations at Weston Canyon Rockshelter, Southeastern Idaho. *Tebiwa* 27(1):1-64.  
Reinvestigation of a site containing one of the most impressive records of bighorn sheep hunting and processing in the northern Great Basin where initial human use dates back to approximately 7000 B.C.
- R** Arkush, Brooke S. 1999. Numic Pronghorn Exploitation: A Reassessment of Stewardian-Derived Models of Big-Game Hunting in the Great Basin. In: Julian Steward and the Great Basin: The Making of an Anthropologist, Richard O. Clemmer, L. Daniel Myers, and Mary E. Rudden, eds., pp. 33-52. Salt Lake City: University of Utah Press.  
A critical evaluation of ethnographic and historical information concerning communal pronghorn hunting in light of recent archaeological data, which suggests that group drives were common in many parts of the Intermountain West prior to Euroamerican settlement and the disruption of Native lifeways and Great Basin ecosystems.
- R** Arkush, Brooke S., and Bonnie L. Pitblado, 2000. Paleoarchaic Surface Assemblages in the Great Salt Lake Desert, Northwestern Utah. *Journal of California and Great Basin Anthropology* 22(1):12-42.  
An early report concerning the technological organization and source locations of chipped stone tools from a number of Paleoarchaic-aged (ca. 11,000 - 6500 B.C.) sites in the central Great Salt Lake Desert. This area contains an unusually large number of terminal Pleistocene/early Holocene archaeological sites, many of which occur along the receding shorelines of Lake Bonneville.
- R** Arkush, Brooke S. 2002. Archaeology of the Rock Springs Site: A Multi-Component Bison Kill and Processing Camp in Curlew Valley, Southeastern Idaho. *Boise State University Monographs in Archaeology No. 1*.  
An account of one of the western-most bison drives in North America, this monograph illustrates the importance of communal bison hunting among Native peoples in southern Idaho between A.D. 1000 and 1800.

#### **4. Career Interruptions and Special Circumstances**

None.

## **5. Contributions to Training Over the Last Six Years**

### **M.A.**

Brandon Sybrowsky. *The Archaeological Record of Early Twentieth Century Communal Horse Trapping in the Mountains of Central Idaho*. (Committee member, successful defense, July 25, 2008, Central Washington University, Ellensburg, Washington)

### **B.I.S. (Bachelor of Integrated Studies)**

Sahra Jones. B.I.S. Capstone Project title: *Innovative Methods in Archaeological Documentation: Geological and Forensic Analysis*. (Capstone committee member, successful defense, April 20, 2011)

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<b>Internal use</b>	CID (if known)
234331	112222

## Identification

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

### Name

Family name	Given name	Initials	Title
Billinger	Michael	S	Dr.

### Citizenship - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input checked="" type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
				<input type="radio"/> Yes <input type="radio"/> No

### Statistical and Administrative Information

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1975	<input type="radio"/> F <input checked="" type="radio"/> M	K1R5S2	<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

## Contact Information

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	613	3664166		1	780	7091244	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail michael.billinger@gmail.com							
Secondary E-mail msb3@ualberta.net							

**Checked**

Web CV

2011/10/07

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**

**Do not photocopy this page.**

Family name, Given name

Billinger, Michael

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address 205-341 Flora Street			Address		
City/Municipality Ottawa			Prov. / State ON		Postal/Zip code K1R5S2
Country CANADA			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality			Prov./ State		Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)		Temporary telephone/fax number Country code    Area code    Number    Extension		
Temporary E-mail					

Family name, Given name

Billinger, Michael

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	240	Indigenous peoples
2		
3		

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>15000 BC AD</p> <p><input checked="" type="radio"/> <input type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>2011 BC AD</p> <p><input type="radio"/> <input checked="" type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2	2000	South America
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1			
2			
3			
4			
5			

Family name, Given name

**Curriculum Vitae**

Billinger, Michael

**Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Spanish
French	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Independent Researcher				2006/7
Org. code	Full organization name			
1480111	University of Alberta			
Department/Division name				
Institute of Prairie Archeology				
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Federal government employee			2011/5	2011/10
Org. code	Full organization name			
1	Office of the Privacy Commissioner of Canada			
Department/Division name				
Investigations Branch				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Co-ordinator			2005/8	2011/12
Org. code	Full organization name			
1	Edmonton Police Service			
Department/division name				
Freedom of Information and Protection of Privacy Unit				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Human Osteologist			2002/8	2002/8
Org. code	Full organization name			
1	Royal Canadian Mounted Police			
Department/Division name				
"E" Division Major Crimes Section				

Family name, Given name

Billinger, Michael

## Work Experience (cont'd)

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Teaching Assistant		2001/8	2005/8
Org. code	Full organization name		
1480111	University of Alberta		
Department/Division name			
Anthropology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Consultant		2000/8	2005/8
Org. code	Full organization name		
1	Alberta Community Development		
Department/Division name			
History and Archaeology Section			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Lecturer		2000/8	2000/8
Org. code	Full organization name		
1480111	University of Alberta		
Department/Division name			
Anthropology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Teaching Assistant		1999/8	2000/8
Org. code	Full organization name		
1350211	Carleton University		
Department/Division name			
Sociology and Anthropology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		2001/09		2006/07
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1480111	University of Alberta			
Country <b>CANADA</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1999/09		2000/08
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1350211	Carleton University			
Country <b>CANADA</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1994/09		1999/04
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60299	Anthropology and Law (Combined Honours)	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1350211	Carleton University			
Country <b>CANADA</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				



Family name, Given name

Billinger, Michael

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Graduate Scholarship	Am Museum of Nat History Collection Study Grant	UNITED STATES		\$1,500 2002
Fellowship	Government of Alberta Graduate Fellowship	CANADA	12	\$7,000 2002
Graduate Scholarship	UAlberta Graduate Studies Research Scholarship	CANADA		\$1,500 2002
Graduate Scholarship	UAlberta Graduate Assistantship Package	CANADA	48	\$70,000 2001
Graduate Scholarship	UAlberta Graduate Intern Tuition Supplement	CANADA	48	\$14,000 2001
Graduate Scholarship	Carleton U Graduate Admissions Scholarship	CANADA	12	\$3,500 1999

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Ethnicity; Human Variation; Cranial Morphology; Forensic Anthropology

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60200	Anthropology	
2	62299	Other Law	Information and Privacy Law
3	55024	Ethics of Science and Technology	
4	60600	Criminology	
5			

(R) BILLINGER MS. 2009. Utilizing ground penetrating radar for the location of a potential human burial under concrete: a case study. *Canadian Society of Forensic Science Journal* 42(3):200–209.

(R) BILLINGER MS. 2008. A technoethical approach to the race problem in anthropology. Pp. 44–60 (Chapter IV) in R. Luppicini & R. Adell (eds.), *Handbook of Research on Technoethics*. Hershey, PA: IGI Global.

(R) BILLINGER MS. 2007. Racial classification in the evolutionary sciences: a comparative analysis. *History and Philosophy of the Life Sciences* 29(4):429–467

(R) BILLINGER MS. 2007. Another look at ethnicity as a biological concept: moving anthropology beyond the race concept. *Critique of Anthropology* 27(1):5–35.

BILLINGER MS. 2007. Gene expression and ethnic differences. *Science* 315(5813):766.

BILLINGER MS. 2006. Rethinking race. *Anthropology News* 47(5):3.

BILLINGER MS. 2006. *Beyond The Racial Paradigm: New Perspectives on Human Biological Variation*. PhD Dissertation. Edmonton: Department of Anthropology, University of Alberta.

BILLINGER MS. 2000. *Geography, Genetics, and Generalizations: The Abandonment of 'Race' in the Anthropological Study of Human Biological Variation*. Master's Thesis. Ottawa: Department of Sociology & Anthropology, Carleton University.

BILLINGER MS. 1999. *A Critical Forensic Anthropological Analysis of Craniofacial Morphology and the Determination of Race in Human Skeletal Remains*. Honours Thesis. Ottawa: Department of Sociology & Anthropology, Carleton University.

BILLINGER M. 1999. Science and social construction: a critical forensic anthropological analysis of craniofacial morphology and the determination of race in human skeletal remains. Abstracts from the 46th Annual Meeting. *Canadian Society of Forensic Science Journal* 32(4):131.

**Do not photocopy this page.**

<b>Internal use</b>	CID (if known)
675077	204838

## Identification

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

### Name

Family name	Given name	Initials	Title
Brock	Fiona		Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian <input type="radio"/> Permanent resident since (yyyy/mm/dd) _____	<input checked="" type="radio"/> Other (country) <u>UNITED KINGDOM</u>	Have you applied for permanent residency? <input type="radio"/> Yes <input checked="" type="radio"/> No
--------------------	---	---	--

### Statistical and Administrative Information

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1975	<input checked="" type="radio"/> F <input type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

## Contact Information

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
44	1865	285210					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail <u>fiona.brock@rlaha.ox.ac.uk</u>							
Secondary E-mail							

**Checked**

Web CV

2011/09/26

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**

**Do not photocopy this page.**

Family name, Given name

Brock, Fiona

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address Dyson Perrins Building			Address		
South Parks Road					
Oxford					
OX1 3QY			City/Municipality		Prov. / State
					Postal/Zip code
Country UNITED KINGDOM			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality		Prov. / State	City/Municipality		Prov. / State
					Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)		End date (yyyy/mm/dd)	Temporary telephone/fax number Country code    Area code    Number    Extension		
Temporary E-mail					

Family name, Given name

Brock, Fiona

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	360	Science and technology
2		
3		

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p><b>Year</b></p> <p>_____ BC AD</p> <p>_____ ○ ○</p> <p>_____ ○ ○</p>	<p><b>Year</b></p> <p>_____ BC AD</p> <p>_____ ○ ○</p> <p>_____ ○ ○</p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1			
2			
3			
4			
5			

Family name, Given name

Brock, Fiona

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)	
Postdoctoral fellow or associate				2005/9	
Org. code		Full organization name			
9121131		University of Oxford			
Department/Division name					
Research Laboratory for Archaeology and the History of Art					
Position type		<input type="radio"/> Tenured <input type="radio"/> Non-tenure		Employment status	
<input type="radio"/> Tenure-track <input type="radio"/> Non-academic				<input type="radio"/> Full-time <input checked="" type="radio"/> Part-time	
				<input type="radio"/> Non-salaried <input type="radio"/> Leave of absence	
Position				Start date (yyyy/mm)	End date (yyyy/mm)
Public sector employee				2004/9	2004/9
Org. code		Full organization name			
1		Arts & Humanities Research Board			
Department/Division name					
Research					
Position				Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate				2003/9	2004/9
Org. code		Full organization name			
9121825		Cardiff University			
Department/division name					
School of Earth and Ocean Sciences					
Position				Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate				2002/9	2003/9
Org. code		Full organization name			
9121107		University of Bristol			
Department/Division name					
Dept. of Earth Sciences					

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

Family name, Given name

Brock, Fiona

## Work Experience (cont'd)

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Public sector employee		2001/9	2001/9
Org. code	Full organization name		
1	Natural Environment Research Council		
Department/Division name			
Research Funding			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			

Brock, Fiona

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1997/10		2001/03
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80099	Biogeochemistry	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121107	University of Bristol			
Country UNITED KINGDOM				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1993/09		1996/06
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80300	Chemistry	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121100	University of Manchester			
Country UNITED KINGDOM				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				



Family name, Given name

Brock, Fiona

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

radiocarbon dating; biogeochemistry

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60420	Methods and Techniques	
2			
3			
4			
5			

# 1. RESEARCH CONTRIBUTIONS OVER THE LAST SIX YEARS (2006-2011)

## A. REFEREED CONTRIBUTIONS

- R Staff RA, Bronk Ramsey C, Bryant CL, **Brock F**, Payne RL, Schlolaut G, Marshall MH, Brauer A, Lamb HF, Parasov P, Yokoyama Y, Haraguchi T, Gotanda K, Yonenobu H, Nakagawa T, Suigetsu 2006 Project Members. 2011. New 14C determinations from Lake Suigetsu, Japan: 12,000 to 0 cal BP. *Radiocarbon* 53(3):511-528. (*Carried out some laboratory work, involved in initial method development.*)
- R Bonneau A, **Brock F**, Higham T, Pearce DG, Pollard AM. 2011. An improved pretreatment protocol for radiocarbon dating black pigments in San rock art. *Radiocarbon* 53(3):419-428. (*Trained student who carried out the work, assisted in writing paper*)
- Higham TFG, Bronk Ramsey C, **Brock F**, Baker D, Ditchfield P. 2011. Radiocarbon dates from the Oxford AMS System: *Archaeometry* datelist 34. *Archaeometry* 53(5):1067-1084 (*Assisted with management of samples*)
- R Ostapkowicz J, Wiedenhoeft A, Bronk Ramsey C, Ribechini E, Wilson S, **Brock F**, Higham T. 2011. ‘Treasures...of black wood, brilliantly polished’: five examples of Taíno sculpture from the tenth-sixteenth century Caribbean. *Antiquity* 85:942-959. (*Assisted with fieldwork, radiocarbon-dated samples*)
- R Rebollo, N.R., Weiner, S., **Brock, F.**, Meignen, L., Goldberg, P., Belfer-Cohen, A., Bar-Yosef, O. & Boaretto, E. (2011). New radiocarbon dating of the transition from the Middle to the Upper Paleolithic in Kebara Cave, Israel. *Journal of Archaeological Science* v. 38, pp. 2424-2433. (*Radiocarbon-dated samples*)
- R Arnold, L. J., Roberts, R. G., MacPhee, R. D. E., Haile, J. S., **Brock, F.**, Moller, P., Froese, D. G., Tikhonov, A. N., Chivas, A. R., Gilbert, M. T. P. & Willerslev, E. (2011). Paper II – Dirt, dates and DNA: OSL and radiocarbon chronologies of perennially frozen sediments in Siberia, and their implications for sedimentary ancient DNA studies. *Boreas*, v. 40, pp. 417–445. (*Radiocarbon-dated samples*)
- R F. Brock**, D.G. Froese & R.G. Roberts (2010). Low temperature (LT) combustion of sediments does not provide accurate radiocarbon dates for site chronology *Quaternary Geochronology*, v. 5 pp. 625-630. (*Designed and ran experiments, wrote paper*)
- R J. Tyler, Y. Kashiwayama, N. Ohkouchi, N. Ogawa, Y. Yokoyama, Y. Chikaraishi, R.A. Staff, M. Ikehara, C. Bronk Ramsey, C. Bryant, **F. Brock**, K. Gotandam T. Haraguchi, H. Yonenobu & T. Nakagawa (2010). Tracking aquatic change using chlorine-specific carbon and nitrogen isotopes: The last glacial-interglacial transition at Lake Suigetsu, Japan. *G<sup>3</sup>* v. 11 (9) Q09010, doi:10.1029/2010GC003186. (*Project team member*)
- R P.L. Ascough, M.I. Bird, W. Meredith, R.E. Wood, C.E. Snape, **F. Brock**, T.F.G. Higham, D. Large & D.C. Apperley (2010). Hydropyrolysis: Implications for radiocarbon pretreatment and characterization of Black Carbon *Radiocarbon* v. 52 (2-3) pp. 1336-1350. (*Radiocarbon dated samples*)
- R C. Bronk Ramsey, M.W. Dee, J.M. Rowland, T.F.G. Higham, S.A. Harris, **F. Brock**, A. Quiles, E.M. Wild, E.S. Marcus & A.J. Shortland (2010). Radiocarbon-based chronology for Dynastic Egypt. *Science* v. 328 pp. 1554-1557. (*Assisted in sampling, radiocarbon-dated samples*)
- F. Brock**, T.F.G. Higham, P. Ditchfield, & C. Bronk Ramsey (2010). Current pretreatment methods for AMS radiocarbon dating at the Oxford Radiocarbon Accelerator Unit (ORAU). *Radiocarbon* v. 52 (1) pp. 103-112. (*Assisted in sample management*)

- R **F. Brock**, T.F.G. Higham & C. Bronk Ramsey (2010). Pre-screening techniques for identification of samples suitable for radiocarbon dating of poorly preserved bones. *Journal of Archaeological Science* v. 37 pp. 855-865. (Managed project, carried out laboratory work, wrote paper)
- R M.W. Dee, **F. Brock**, S.A. Harris, C. Bronk Ramsey, A.J. Shortland, T.F.G. Higham & J.M. Rowland (2010). Investigating the likelihood of a reservoir offset in the radiocarbon record for Ancient Egypt. *Journal of Archaeological Science* v. 37 pp. 687-693. (Assisted in experimental design, sampling, laboratory work)
- R Broglio, A., De Stefani, M., Gurioli, F., Pallecchi, P., Giachi, G., Higham, T. & **Brock, F.** 2009, "The decoration of Fumane Cave in the picture of the Aurignacian art", *Anthropologie*, vol. 113, no. 5, pp. 753-761. (Radiocarbon dated samples)
- R G. Zazula, G. MacKay, T.D. Andrews, B. Shapiro, B. Letts, **F. Brock** (2009). A late Pleistocene steppe bison (*Bison priscus*) partial carcass from Tsiigehtchic, Northwest Territories, Canada. *Quaternary Science Reviews* v. 28 pp. 2734-2742 (Radiocarbon-dated sample)
- R **F. Brock** & T.F.G. Higham (2009). AMS Radiocarbon dating of Paleolithic-aged charcoal from Europe and the Mediterranean Rim using ABOx-SC. *Radiocarbon* v. 51(2) pp. 839-846  
(Co-I for funding, radiocarbon dated samples, analysed results wrote publication.)
- R P. L. Ascough, M. I. Bird, **F. Brock**, T.F.G. Higham, W. Meredith, C. E. Snape & C. H. Vane (2009). Hydropyrolysis as a new tool for radiocarbon pre-treatment and the quantification of black carbon. *Quaternary Geochronology* v. 4(2) pp. 140-147.  
(Radiocarbon dated samples.)
- C. Bronk Ramsey, T.F.G. Higham, **F. Brock**, D. Baker & P. Ditchfield (2009). Radiocarbon dates from the Oxford AMS System: Archaeometry datelist 33. *Archaeometry* v. 51(2) pp. 323-349.  
(Assisted with management of samples.)
- R T.F.G. Higham, **F. Brock**, M. Peresani, A. Broglio, R. Wood & K. Douka (2009) Problems with radiocarbon dating the Middle to Upper Palaeolithic transition in Italy. *Quaternary Science Reviews* v. 28 pp. 1257-1267.  
(Co-I for funding, radiocarbon dated samples, analysed results wrote publication.)
- R T.F.G. Higham, H. Barton, C.S.M. Turney, G. Barker, C. Bronk Ramsey & **F. Brock** (2009) Radiocarbon dating of charcoal from tropical sequences: Results from the Niah Great Cave, Sarawak and their broader implication. *Journal of Quaternary Science* v. 24(2) pp 189-197.  
(Radiocarbon-dated samples.)
- R D.D. Stynder, **F. Brock**, J.C. Sealy, S. Wurz, A.G. Morris & T.P. Volman (2009) A mid-Holocene AMS  $^{14}\text{C}$  date for the presumed upper Pleistocene human skeleton from Peers Cave, South Africa. *Journal of Human Evolution* v. 56 pp. 431-434.  
(Radiocarbon-dated samples.)
- R G.D. Zazula, C.R. Harrington, A.M. Telka, & **F. Brock** (2009). Radiocarbon dates reveal that *Lupinus arcticus* plants were grown from modern not Pleistocene seeds. *New Phytologist* v. 182 pp. 788-792  
(Radiocarbon-dated samples.)
- R L.J. Arnold, R.G. Roberts, R.D.E. MacPhee, E. Willerslev, A.N. Tikhonov & **F. Brock** (2008). Optical dating of perennially frozen deposits associated with preserved ancient

plant and animal DNA in north-central Siberia. *Quaternary Geochronology* v. 3 (1-2) pp. 114-136

(Radiocarbon-dated samples.)

- R M. DeMuro, R.G. Roberts, D.G. Froese, L.J. Arnold, **F. Brock** & C. Bronk Ramsey (2008). Optically stimulated luminescence dating of single and multiple grains of quartz from perennially-frozen loess in western Yukon Territory, Canada: Comparison with radiocarbon chronologies for the late Pleistocene Dawson tephra. *Quaternary Geochronology* v.3 (4) pp. 346-364.

(Field-work to collect samples, radiocarbon-dated samples.)

- R E.M. Wild, C. Neugebauer-Maresch, T. Einwögerer, P. Stadler, P. Steier & **F. Brock** (2008).  $^{14}\text{C}$ -Dating of the Upper Paleolithic Site at Krems-Hundssteig in Lower Austria. *Radiocarbon* v. 50 (1) pp.1-10.

(Radiocarbon-dated samples.)

- R **F. Brock**, C.B. Ramsey & T.F.G Higham (2007). Quality assurance of ultrafiltered bone dating. *Radiocarbon* v. 49 (2) pp. 187-192

(Assembled data, wrote paper.)

T.F. Higham, C. Bronk Ramsey, **F. Brock**, D. Baker & P. Ditchfield (2007) Radiocarbon dates from the Oxford AMS system: Archaeometry Datelist 32 *Archaeometry* v. 49 Supp/1 pp. S1-S60.

(Assisted with sample management)

- R R.J. Parkes, B.A. Cragg, N. Banning, **F. Brock**, G. Webster, J.C. Fry, E.R.C. Hornibrook, R.D. Pancost, S. Kelly, N. Knab, B.B. Jorgensen, J. Rinna & A.J. Weightman (2007) Biogeochemistry and biodiversity of methane cycling in subsurface marine sediments (Skagerrak, Denmark). *Environmental Microbiology* v 9 pp. 1146-1161.

(Fieldwork to collect samples, laboratory analysis of samples)

- R **F. Brock**, R.J. Parkes & D.E.G. Briggs (2006) Experimental pyrite formation associated with decay of plant material. *Palaios*, v. 21 pp. 499-506.

(PhD Thesis research)

#### OTHER REFEREED CONTRIBUTIONS

- R Ringbom Å, Heinemeier J, Lindroos A, **Brock F.** 2011. Mortar dating and Roman pozzolana, results and interpretations. In: Ringbom Å, Hohlfelder RL, editors. Building Roma Aeterna, Current Research on Roman Mortar and Concrete, Proceedings of the conference, March 27-29, 2008. *Commentationes Humanarum Litterarum* 128:184-205.

(Undertook laboratory work)

- R Hodgins G, Lindroos A, Ringbom Å, Heinemeier J, **Brock F.** 2011.  $^{14}\text{C}$  dating of Roman mortars: preliminary tests using titration with diluted hydrochloric acid. In: Ringbom Å, Hohlfelder RL, editors. Building Roma Aeterna, Current Research on Roman Mortar and Concrete, Proceedings of the conference, March 27-29, 2008. *Commentationes Humanarum Litterarum* 128:206-10.

(Undertook laboratory work)

- R Lindroos A, Heinemeier J, Ringbom Å, **Brock F**, Sonck-Koota P, Pehkonen M, Suksi J. 2011. Problems in radiocarbon dating of Roman pozzolana mortars. In: Ringbom Å, Hohlfelder RL, editors. Building Roma Aeterna, Current Research on Roman Mortar and Concrete, Proceedings of the conference, March 27-29, 2008. *Commentationes Humanarum Litterarum* 128:211-27. (Undertook laboratory work)

**NON-REFEREED CONTRIBUTIONS**

- Pollard, A.M. & **F. Brock** (2011). Provenancing Parchment, Leather and Paper using Stable Isotopes. *In: The Technological Study of Books and Manuscripts as Artefacts: Research questions and analytical solutions*. S. Neate, D. Howell, R. Ovenden & A.M. Pollard (Eds). BAR International Series, Oxford, UK. (*Designed and undertook laboratory work, co-wrote paper*).
- Ostapkowicz J, Bronk Ramsey C, Wiedenhoeft AC, **Brock F**, Higham T, Wilson SM. 2011. 'This Relic of Antiquity': Fifth to fifteenth century wood carvings from the southern Lesser Antilles. *In: Communities in Contact: Essays in archaeology, ethnohistory & ethnography of Amerindian circum-Caribbean*. Eds CL Hofman & A van Duijvenbode. Sidestone Press, Leiden. (*Carried out fieldwork and laboratory work*)
- **F. Brock**, T. Higham & C.B, Ramsey (2007). Radiocarbon dating bone samples recovered from gravel sites. *English Heritage Research Department Report Series no. 30/2007*. (*Managed project, carried out laboratory work, wrote report*)
- A. Ringbom, J. Hale, J. Heinemeier, A. Lindroos & **F. Brock** (2006), Mortar Dating in Medieval and Classical Archaeology. *CHS Newsletter no. 73*. (*Radiocarbon dated samples*)

**FORTHCOMING CONTRIBUTIONS**

- **F. Brock**, S. Lee, R.A. Housley & C. Bronk Ramsey. 2011. Variation in the radiocarbon age of different fractions of peat: a case study from Ahrenshöft, northern Germany. *Quaternary Geochronology (in press)*. (*Wrote paper, radiocarbon-dated samples, planned some aspects of work*).
- R.A. Housley, C.S. Lane, V. Cullen, M-J. Weber, F. Riede, C.S. Gamble, and **F. Brock** Icelandic volcanic ash from the Late-glacial open-air archaeological site of Ahrenshöft LA58 D, north Germany. *Journal of Archaeological Science (submitted)*. (*Carried out radiocarbon dating*).
- **F. Brock**, J. Ostapkowicz, C. Bronk Ramsey, A. Wiedenhoeft & C. Cartwright: Paired dating of pith and outer edge (terminus) samples from Pre-Hispanic Caribbean wooden sculptures. *Radiocarbon (submitted)*. (*Undertook laboratory work, wrote paper*).
- **F. Brock**, R. Wood, T. Higham, P. Ditchfield, A. Bayliss & C. Bronk Ramsey: The reliability of nitrogen content (%N) and carbon:nitrogen atomic ratios (C:N) as indicators of collagen preservation suitable for radiocarbon dating. *Radiocarbon (revised and submitted)*. (*Designed analysis, led study, wrote paper*).

**2. OTHER RESEARCH CONTRIBUTIONS:** None.

**3. MOST SIGNIFICANT CAREER RESEARCH CONTRIBUTIONS:** N/A

**4. CAREER INTERRUPTIONS:** June 2008-April 2009: Maternity leave.

**5. CONTRIBUTIONS TO TRAINING**

- Introduction to Radiocarbon Dating: 3 day practical for new graduate students (yearly, 2005-2009)
- Short Course in Radiocarbon Dating, run by University of Oxford Dept of Continuing Education (March 2009, 2011). Contribution to teaching.
- Lecture on Radiocarbon Dating given to MSc Forensic Archaeology course at University of Cranfield, UK. (March 2010, 2011)
- Individual laboratory training in radiocarbon preparation techniques given to MSc and DPhil students.

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Internal use	CID (if known)
699259	204835

## Identification

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

### Name

Family name	Given name	Initials	Title
Eiselt	Sunday	B	Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
			UNITED STATES	<input type="radio"/> Yes <input type="radio"/> No

### Statistical and Administrative Information

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1966	<input checked="" type="radio"/> F <input type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

## Contact Information

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	480	755-7825		1	214	768-2915	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail seiselt@smu.edu							
Secondary E-mail seiselt@gmail.com							

Checked

Web CV

2011/09/25

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

PROTECTED B WHEN COMPLETED

**Do not photocopy this page.**

Family name, Given name

Eiselt, Sunday

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address Southern Methodist University			Address		
Dept. Anthropology					
3225 Daniel Ave., Heroy Hall					
City/Municipality Dallas	Prov. / State TX	Postal/Zip code 75205	City/Municipality	Prov. / State	Postal/Zip code
Country UNITED STATES			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality	Prov. / State		City/Municipality	Prov. / State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)		Temporary telephone/fax number Country code    Area code    Number    Extension		
Temporary E-mail					

Family name, Given name

Eiselt, Sunday

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	240	Indigenous peoples
2	300	Multiculturalism and ethnic studies
3	100	Arts and culture

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>1400 BC AD</p> <p>1000 BC AD</p>	<p>Year</p> <p>1850 BC AD</p> <p>1400 BC AD</p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2		
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1	1200	UNITED STATES	NM
2	1200	UNITED STATES	NE
3	1200	UNITED STATES	UT
4	1200	UNITED STATES	AZ
5	1200	UNITED STATES	NV



Family name, Given name

Eiselt, Sunday

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Assistant Professor				2008/9
Org. code	Full organization name			
9969103	Southern Methodist University			
Department/Division name				
Anthropology				
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time
	<input checked="" type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Visiting Professor			2006/9	2008/9
Org. code	Full organization name			
9969103	Southern Methodist University			
Department/Division name				
Anthropology				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Instructor			2004/9	2004/9
Org. code	Full organization name			
9938101	University of Michigan, Ann Arbor			
Department/division name				
Anthropology				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Project Director			2003/9	2005/9
Org. code	Full organization name			
1	Gila River Indian Community			
Department/Division name				
Cultural Resource Management Program				

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

Family name, Given name

Eiselt, Sunday

## Work Experience (cont'd)

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Student		1998/9	2006/9
Org. code	Full organization name		
9938101	University of Michigan, Ann Arbor		
Department/Division name			
Anthropology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			

Eiselt, Sunday

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate	Ph.D	1998/08		2006/02
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60432	Trade and Trade Routes, Culture Contact, Cultural Relations	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9938101	University of Michigan, Ann Arbor			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's	Master of Arts	1995/08		1998/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9978101	University of Nevada, Reno			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.	Bachelor of Arts	1990/08		1995/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9983109	California State University, Chico			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

Eiselt, Sunday

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	University of Michigan, Department of Anthropology	UNITED STATES		2004

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Athapaskans; Apache Archaeology; Southwest Archaeology; Ceramic Analysis; Culture Contact; Trade and Diasporas; Interethnic Exchange

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60432	Trade and Trade Routes, Culture Contact, Cultural Relations	
2	60414	Hunters and Gatherers	
3	60418	Material Culture (incl. burials)	
4	60420	Methods and Techniques	
5	60430	Technology, Tool Industries	

Family name, Given name

Eiselt, Sunday

## Funded Research

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Southern Methodist University, University Research Council	2009	\$5,700
Role	Applicant	Completion status	<input type="checkbox"/> Complete
Project title	Childhood Depictions: Creating an Historical Archaeology of Children and Childhood on the Ranchos de Taos Plaza, New Mexico		
Applicant's family name	Applicant's given name	Initials	
Eiselt	Sunday	B	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	American Museum of Natural History	2008	\$1,500
Role	Applicant	Completion status	<input checked="" type="checkbox"/> Complete
Project title	A Metric and Visual Examination of Metal-tipped Arrows Attributed to Apache, Comanche, Ute, Navajo, and Pueblo Makers		
Applicant's family name	Applicant's given name	Initials	
Eiselt	Sudnay	B	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Missouri Research Reactor, Archaeometry Laboratory	2007	\$4,320
Role	Applicant	Completion status	<input checked="" type="checkbox"/> Complete
Project title	Hohokam Procurement and Use of Hematite in the Production of Red-on-Buff and Redware Pottery: An INAA Study from the Middle Gila River Valley, Arizona		
Applicant's family name	Applicant's given name	Initials	
Eiselt	Sunday	B	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Missouri Research Reactor, Archaeometry Laboratory	2004	\$3,700
Role	Applicant	Completion status	<input checked="" type="checkbox"/> Complete
Project title	Historic Micaceous Pottery Production and Raw Material Procurement in a Southwestern Horse Nomad Society: The Jicarilla Apache of Northern New Mexico		
Applicant's family name	Applicant's given name	Initials	
Eiselt	Sunday	B	

Personal information will be stored in the Personal Information Bank for the appropriate program.

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Family name, Given name

Eiselt, Sunday

## Funded Research (cont'd)

Org. code 1	Full name of funding organization Picuris Pueblo, Federally Recognized Tribe	Year awarded (yyyy) 2004	Total amount (CAN\$) \$35,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Sangre de Cristo Micaceous Clays and Picuris Pueblo Ceramics: Geochemical Evidence for a Picuris Pueblo Clay Source district and Use of the Molonanna Source Area			
Applicant's family name Eiselt		Applicant's given name Sunday	
Initials B			
Org. code 1	Full name of funding organization Sigma Xi Research Society	Year awarded (yyyy) 2001	Total amount (CAN\$) \$1,500
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Tree-ring dating of Juniper in northern New Mexico Hispanic Sites			
Applicant's family name Eiselt		Applicant's given name Sunday	
Initials B			
Org. code 1	Full name of funding organization Michigan Memorial-Phoenix Project	Year awarded (yyyy) 1999	Total amount (CAN\$) \$10,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Neutron Activation Analysis of Micaceous Clay and Ceramics from the Northern Rio Grande, New Mexico			
Applicant's family name Eiselt		Applicant's given name Sunday	
Initials B			
Org. code 1	Full name of funding organization The Woodrow Wilson Foundation	Year awarded (yyyy) 1999	Total amount (CAN\$) \$5,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title The Jicarilla Apaches and the Evolution of Ethnic Enclaves in Northern New Mexico			
Applicant's family name Eiselt		Applicant's given name Sunday	
Initials B			

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

## 1. Research Contributions over the Last Six Years

### A. Refereed Contributions

- R Eiselt, B. S., Rachel Popelka-Filcoff, J. Andrew Darling, Michael Glascock. (2011) Hematite Sources and Archaeological Ochres from Hohokam and O'odham Sites in Central Arizona: An Experiment in Type Identification and Characterization. *Journal of Archaeological Science* Vol. 38:3019-3028
- R Eiselt, B. S. (2009). Americanist Archaeologies: 2008 in Review. *American Anthropologist* 111(2).
- R Eiselt, B. S. (2009). The Jicarilla Apaches and the Archaeology of the Taos Region. In, *Between the Mountains – Beyond the Mountains: Papers in Honor of Paul R. Williams*, edited by E. Brown, K. Armstrong, D. M. Brugge, C. Condie. Papers of the Archaeological Society of New Mexico Vol. 35, Albuquerque.
- R Darling, J. A., B. Sunday Eiselt (2009). Trails Research in the Gila Bend Area. In *Trails, Rock Features and Homesteading in the Gila Bend Area*, edited by John L. Czarzasty, Katherine Peterson, Glen E. Rice, J. Andrew Darling. Anthropological Research Papers No. 4. University of Arizona Press, Tucson Gila River Indian Community, Sacaton, Arizona
- R Eiselt, B. S., R. I. Ford (2007). Sangre de Cristo Micaceous Clays: Geochemical Indices for Source and Raw Material Distribution, Past and Present. *Kiva, The Journal of Southwest Archaeology and History* Vol. 73(2).
- R Eiselt, B. S. (2006). *The Emergence of Jicarilla Apache Enclave Economy During the 19th-Century in Northern New Mexico*. Ph.D. Dissertation, University of Michigan, Department of Anthropology.
- R Hegmon, M., B. S. Eiselt (2005) *Engaged Anthropology: Research Essays on North American Archaeology, Ethnobotany, and Museology*. Anthropological Papers No. 94. University of Michigan Museum of Anthropology, Ann Arbor.

### B. Other Refereed Contributions (Refereed Conference Presentations)

- R Eiselt B. S. and J. Andrew Darling. (2010) Vecino Archaeology AD 1780-Present. 75th Annual Meeting of the Society for American Archaeology St. Louis, MO (**Organized Symposium**)
- R K. Cooper, B. Sunday Eiselt, and J. Welch (2008) Ways of Becoming: Dynamic Processes in the Creation of Athapaskan Identities and Landscapes. 73rd Annual Meeting of the Society for American Archaeology, Vancouver, B.C. (**Organized Symposium**)
- R Hegmon, M. and B. Sunday Eiselt (2005). Research Papers on Engaged Archaeology and Museology in Honor of Richard I Ford 70th Annual Meeting of the Society for American Archaeology, Salt Lake City, Utah. (**Organized Symposium**)
- R Eiselt B. S. and John W. Ives (2011). Kinship: The Unattended Dimension of Paleoindian Research. **Paper** presented at the 76th Annual Meeting of the Society for American Archaeology, Sacramento, CA (In, Questioning Assumptions: Celebrating the Work and Influence of John D. Speth)
- R J. Andrew Darling and B. Sunday Eiselt (2011) More Uses of the Past: Archaeology in the Service of the Tribe. **Paper** presented the 76th Annual Meeting of the Society for American Archaeology, Sacramento, CA (In, Theory, History, and Multidisciplinarity: Papers in Honor of Don Fowler)
- R Lauren O'Brien and B. Sunday Eiselt (2011) Thermal Efficiency and Durability of Micaceous Clay Cookware from the Northern Rio Grande. **Poster** presented at the 76th Annual Meeting of the Society for American Archaeology, Sacramento, CA.

- R Eiselt, B. S., Katy Pocklington, Nicola Muchnikov (2010) Vecino Archaeology and the Politics of Play. **Paper** presented at the 75th Annual Meeting of the Society for American Archaeology St. Louis, MO
- R Eiselt, B. S. and Felipe V. Ortega (2010) The Potter's Apprentice: First Principles in Archaeological Engagement. **Paper** presented at Southwest Symposium XI – Building Transnational Archaeologies, Hermosillo, Mexico.
- R Eiselt, B. S. (2008). The Southwest Athapaskan Equation. Enclave Ideology in the Colonization of New Mexico by the Jicarilla Apaches. **Paper** presented at the 73rd Annual Society for American Archaeology Meeting, Vancouver, British Columbia.
- R Eiselt, B. S. (2007). Enclave Economy and Ceramic Exchange: Historic and Archaeological Evidence from the Northern Rio Grande of New Mexico. **Paper** presented at the 72nd Annual Society for American Archaeology Meeting, Austin, Texas.
- R J. A. Darling, H. Neff; B. Sunday Eiselt, and L. Newman (2007). Recent Advances in Provenance Research Along the Middle Gila River Valley Using Time of Flight Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS). **Poster** presented at the 72nd Annual Society for American Archaeology Meeting, Austin Texas.
- R Eiselt, B. S. (2006). The Breath of Clay: Enclave Ideology and the Emergence of Pre- Reservation Jicarilla Apache Society **Paper** presented at the 10th Biennial Southwest Symposium, Carlsbad, New Mexico.
- R Eiselt, B. S., R. I. Ford (2006). Clay Source Selection and its Influence on Trace Element Geochemistry of Residual Micaceous Clay: Examples from Northern Rio Grande Potters. **Paper** presented at the American Nuclear Society, Winter Meeting and Nuclear Technology Exposition.
- R Eiselt, B. S. (2005). Micaceous Clay Source Geochemistry and Evidence for Ceramic Source Utilization by Jicarilla, Pueblo, and Hispanic Potters of Northern New Mexico. **Paper** presented at the 2005 Pecos Conference, White Rock, New Mexico.
- R J. A. Darling and B. S. Eiselt (2005). Consumer-Producer Relations and Interethnic Economy of Nineteenth-Century Hispanic Communities of the Lower Chama Valley, New Mexico. **Paper** presented at the 70th Annual Society for American Archaeology meeting, Salt Lake City, Utah.

### C. Non-refereed Contributions

Eiselt, B. S. (2009). Critical Review of United States and Ohkay Owingeh Expert Reports Regarding Precolumbian Water Use in the Santa Cruz and Truchas Watersheds. *New Mexico v. Abbott. Report prepared for the State of New Mexico, Plaintiff. (Expert)*

Eiselt, B. S. (2007). The Emergence of Jicarilla Apache Enclave Economy During the Nineteenth Century in Northern New Mexico. *Archaeology Southwest*, Vol. 21(2), pp. 19. **(Trade Journal)**

Eiselt B. S., R. I. Ford (2006). Analysis of Micaceous Clay Sources in the Northern Rio Grande. *Transactions of the American Nuclear Society, Vol. 101. (Transactions)*

Eiselt, B. S. (2005). Sangre de Cristo Micaceous Clays and Picuris Pueblo Ceramics: Geochemical Evidence for a Picuris Pueblo Clay Source District. *Picuris Pueblo vs. Ogleby Mining Company, Plaintiff. (Expert Testimony on Behalf of the Pueblo)*

### D. Forthcoming Contributions

- R B. Sunday Eiselt. (Accepted for 2012 publication) *Becoming White Clay: A History and Archaeology of Jicarilla Apache Enclavement*. University of Utah Press.
- R Eiselt, B. S. and J. Andrew Darling. (Accepted for 2012 Publication ) Vecino Economics: Gendered Economy and Micaceous Pottery Consumption in Nineteenth-Century Northern New Mexico. *American Antiquity*.
- R Margaret E. Beck, Jill Onken, B. Sunday Eiselt, J. Andrew Darling, and Jeffrey R. Ferguson



(In press) Geomorphological Setting and Native American Acquisition of Buff-firing Ceramic Clays in the Lower and Middle Gila River Valley, Arizona. *Journal of Archaeological Science*.

## 2. Other Research Contributions

Director. Taos Collaborative Archaeology Program, Southern Methodist University in Taos, June 2009 to present.

Research Collaborator. Gila River Indian Community, Cultural Resources Management Program, Sacaton, AZ. January 2005 to present.

Research Affiliate. Mercyhurst Archaeological Institute, Mercyhurst College, Erie, PA. June 2009 to present.

## 3. Most Significant Career Research Contributions

- R Eiselt, B. S. (2009). Americanist Archaeologies: 2008 in Review. *American Anthropologist* 111(2).
- R Eiselt, B. S., R. I. Ford (2007). Sangre de Cristo Micaceous Clays: Geochemical Indices for Source and Raw Material Distribution, Past and Present. *Kiva, The Journal of Southwest Archaeology and History* Vol. 73(2).
- R Eiselt, B. S. (2006). *The Emergence of Jicarilla Apache Enclave Economy During the 19th-Century in Northern New Mexico*. Ph.D. Dissertation, University of Michigan, Department of Anthropology. Hegmon, M., B. S. Eiselt (2005) *Engaged Anthropology: Research Essays on North American Archaeology, Ethnobotany, and Museology*. Anthropological Papers No. 94. University of Michigan Museum of Anthropology, Ann Arbor.
- R Haynes, G. and B. S. Eiselt (1999). The Power of Pleistocene Hunter-Gatherers: Forward and Backward Searching for Evidence About Mammoth Extinction. In, *Humans and Other Catastrophes. In, Patterns and Causes of Late Quaternary Extinctions*, edited by Ross MacPhee. Advances in Vertebrate Paleobiology. Plenum Press, New York.
- R Eiselt, B. S. (1997). Fish Remains from the Spirit Cave Paleofecal Material: 9,400 Year Old Evidence for Great Basin Utilization of Small Fishes. *Nevada Historical Quarterly* 40(1):117-139.

1 **Career Interruptions and Special Circumstances** NA

2 **Contributions to Training over the Last Six Years**

### Ph.D Committees

Albert Gonzalez (SMU). *Chair* Social Memory, Rebellion, and the Economy of Simeon Turley's Grist Mill and Distillery, Taos, New Mexico.

Lauren O'Brien (SMU). *Chair* Gender Ideologies and Ceramic Exchange at Picuris Pueblo, New Mexico.

Susan Bruning (SMU). *Member* NAGPRA Legislation and Repatriation Examples from Hopi, Zuni, and Zia Pueblos, New Mexico.

Marie-Blanche-Roudaut (SMU). *Member* Southwest Pueblo Migration and Ethnogenesis in the Kayenta/Tusayan Area and San Pedro Valley

Leslie Reeder (SMU). *Member* Village Development and Mainland Exchange During the Late Archaic Period in the Channel Islands, California.

Kylie Quave (SMU). *Member* Archaeological and Historical Perspectives on the Inka Estate Community: Investigating the Administration of Maras (Cusco, Peru).

Maeve Skidmore (SMU). *Member* Middle Horizon Migrations, Pikillacta, Lucre Valley, Peru.

Do not photocopy this page.

Internal use	CID (if known)
243899	204836

**Identification**

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

**Name**

Family name	Given name	Initials	Title
Froese	Duane	G	Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input checked="" type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd) _____	<input type="radio"/> Other (country) _____	Have you applied for permanent residency? <input type="radio"/> Yes <input type="radio"/> No
--------------------	---	--	--	---

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1970	<input type="radio"/> F <input checked="" type="radio"/> M	T6G2E3	<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	780	492-1968					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	780	492-2030					
Primary E-mail duane.froese@ualberta.ca							
Secondary E-mail							

**Checked**

Web CV

2011/10/02

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**

**Do not photocopy this page.**

Family name, Given name

Froese, Duane

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address			Address		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Country			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number Country code    Area code    Number    Extension			
Temporary E-mail					

Family name, Given name

Froese, Duane

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	214	Global/Climate Change
2		
3		

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year		BC	AD	Year		BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2	1140	Northern Canada
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1	1100	CANADA	YT
2	1100	CANADA	AB
3	1200	UNITED STATES	AK
4	1200	UNITED STATES	WA
5			

Family name, Given name

Froese, Duane

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Associate Professor and CRC				2003/9
Org. code	Full organization name			
1480111	University of Alberta			
Department/Division name				
Earth and Atmospheric Sciences				
Position type	<input checked="" type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Postdoctoral fellow or associate			2002/10	2003/10
Org. code	Full organization name			
1590611	Simon Fraser University			
Department/Division name				
Earth Sciences				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/division name				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/Division name				

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate	PhD	1997/09		2001/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80500	Earth Sciences	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1480211	University of Calgary			
Country CANADA				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's	MSc.	1995/09		1997/08
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80500	Earth Sciences	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1480211	University of Calgary			
Country CANADA				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.	BSc	1990/09		1994/04
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80500	Earth Sciences	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1480411	University of Lethbridge			
Country CANADA				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

Froese, Duane

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	CRC in Northern Environmental Change	Federal Government CANADA	60	\$500,000 2010
Academic Prize	Faculty of Science Research Award	University CANADA		\$2,000 2010
Fellowship	Alberta Ingenuity New Faculty Award	CANADA	36	\$300,000 2006
Academic Prize	J.R.Mackay Young Researcher Award	CANADA		\$0 2006

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Quaternary geoscience; dating methods; radiocarbon; environmental change; sedimentology; stratigraphy; geoarchaeology

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	80500	Earth Sciences	
2	80099	Other Natural Sciences and Engineering	Quaternary geoscience
3			
4			
5			

Family name, Given name

Froese, Duane

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Canada Research Chairs program	2010	\$500,000
Role	Applicant	Completion status	<input type="checkbox"/> Complete
Project title	CRC in Northern Environmental Change		
Applicant's family name	Applicant's given name	Initials	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
3010316	Natural Sciences and Engineering Research Council of Canada	2009	\$120,000
Role	Applicant	Completion status	<input type="checkbox"/> Complete
Project title	NSERC Discovery Accelerator Supplement		
Applicant's family name	Applicant's given name	Initials	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
3010316	Natural Sciences and Engineering Research Council of Canada	2009	\$50,000
Role	Applicant	Completion status	<input type="checkbox"/> Complete
Project title	NSERC Northern Research Supplement		
Applicant's family name	Applicant's given name	Initials	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
3010316	Natural Sciences and Engineering Research Council of Canada	2009	\$385,000
Role	Applicant	Completion status	<input type="checkbox"/> Complete
Project title	Tephrostratigraphic and paleoenvironmental studies in unglaciated Yukon and Alaska: Analogues for a future, warmer Arctic		
Applicant's family name	Applicant's given name	Initials	



## 1. Research Contributions Over the Last Six Years (2006-2011)

**Select Refereed Papers/Volumes (2006-2011) 43 Papers +1 Edited Volume- only 30 listed here due to space (PDF and Graduate Students Underlined)**

- R** D'Costa, C. King, V., Kalan, L., Morar, M., Wilson, S., Schwarz, C., Froese, D.G., Zazula, G.D., **Calmels, F.**, Debruyne, R., Golding, G.B., Poinar, H., Wright, G.D. (2011). Antibiotic resistance is ancient. *Nature*, 477, 457-461.
- R** Schweger, C.E., Froese, D.G., White, J.M., and J.A. Westgate. 2011. Pre-glacial and interglacial pollen records over the last 3 Ma from northwest Canada: Why do Holocene forests differ from those of previous interglaciations? *Quaternary Science Reviews*, 30, 2124-2133.
- R** Zazula, G.D., Froese, D.G., Elias, S.A., Kuzmina, S., and Matthewes, R.W. 2011. Early Wisconsinan (MIS 4) arctic ground squirrel middens and a squirrel-eye view of the mammoth-steppe: *Quaternary Science Reviews*, 33, 2220-2237.
- R** Brock, F., Froese, D.G., and R.G. Roberts. 2011. Low temperature combustion of bulk sediments does not preclude old carbon bias. *Quaternary Geochronology*, 5, 625-630.
- R** Arnold, L.J., Roberts, R.G., MacPhee, R.D.E., Haile, J.S., Brock, F., Moller, P., Froese, D.G., Tihonov, A.N., Chivas, A.R., and E. Willerslev 2011. Dirt, dates and DNA: OSL and radiocarbon chronologies of perennially-frozen sediments in Siberia, and their implications for sedimentary ancient DNA studies. *Boreas*, 40, 417-445
- R** **Reyes AV**, Zazula GD, **Kuzmina S**, Ager TA, Froese DG (2011) Identification of last interglacial deposits in eastern Beringia: a cautionary note from the Palisades, interior Alaska. *Journal of Quaternary Science*. 26, 345-352.
- R** **Kennedy, K.E.**, Froese, D.G., Zazula, G.D., and B. Lauriol. 2010. Last Glacial Maximum age for the northwest Laurentide maximum from the Eagle River spillway and delta complex, northern Yukon: *Quaternary Science Reviews*, 29, 1288-1300.
- R** **Reyes, A.V.**, Froese, D.G., and **B.J. Jensen** 2010. Response of permafrost to last interglacial warming: field evidence from non-glaciated Yukon and Alaska. *Quaternary Science Reviews*, 29, 3256-3274.
- R** **Reyes, A.V.**, **Jensen, B.J.L.**, Zazula, G.D., Ager, T.A., **Kuzmina, S.**, La Farge, C., Froese, D.G. 2010. A late-Middle Pleistocene (Marine Isotope Stage 6) vegetated surface buried by Old Crow tephra at the Palisades, interior Alaska: *Quaternary Science Reviews*, 29, 801-811.
- R** Szpak, P., Grocke, D.R., Debruyne, R., MacPhee, R.D.E., Guthrie, R.D., Froese, D.G., Zazula, G.D., Patterson, W.P. Poinar, H.N. 2010. Regional differences in bone collagen [ $\delta$ ]<sup>13</sup>C and [ $\delta$ ]<sup>15</sup>N of Pleistocene mammoths: Implications for paleoecology of the mammoth-steppe: *Palaeogeography, Palaeoclimatology, Palaeoecology*, 286 (1-2), 88-96.
- R** Haile, J. Froese, D.G., MacPhee, R.D.E., Roberts, R.G., Arnold, L.J., **Reyes, A.V.**, Rasmussen, M., Nielson, R. Brook, B.W., **Robinson, S.**, Demuro, M. Gilbert, M.T.P., Munch, K., Austin, J. Cooper, A., Barnes, I., and E. Willerslev. Ancient DNA reveals late survival of mammoth and horse in interior Alaska. *Proceedings of the National Academy of Science, USA*, 106, 22352-22357.
- R** Lacelle, D., St.Jean, M., Clarke, I.D., Lauriol, B., Froese, D.G., Kuehn, S.K., and G.D. Zazula, in press. Burial history of a relict snowbank body and vegetation by the Dawson tephra (25,300 <sup>14</sup>C years BP), Ogilvie Mountains, central Yukon, Canada, *Quaternary Science Reviews*
- R** Froese, D.G., Reyes, A.V., Westgate, J.A., Preece, S.J. 2009a. Implications of ancient ice: response: *Science*, 323 (5915), 714-715.
- R** Froese, D.G., Zazula, G.D., Westgate, J.A., Preece, S.J., Sanborn, P., Reyes, A.V. and N.J.P Pearce. 2009b. The Klondike goldfields and Pleistocene environments of Beringia: *Geological Society of America (GSA) Today*, 19 (8), 4-10.

- R Kuehn, S., Froese, D.G., Foit, N., Carrara, P., Pearce, N.J.P., and Rotheisler, P., 2009, Late Pleistocene Glacier Peak tephra set revisited and revised: Major and trace element characterization, new distribution and chronology in western North America: *Quaternary Research*, 71, 201-216.
- R Thomsen, P.F., Elias, S., Gilbert, M.T.P., Haile, J., Munch, K., Kuzmina, S., Froese, D.G., Sher, A., Holdoway, R., and E. Willerslev. 2009. How far can non-destructive sampling studies of ancient DNA take us? *PLoS One*, 4 (4), e5408.
- R Froese, D.G., Westgate, J.A., Reyes, A.V., Enkin, R.J., and S.J. Preece, 2008 Ancient permafrost and a future, warmer Arctic: *Science*, 321, 1648.
- R Herd, C.D.K., Froese, D.G., Walton, E.L., Kofman, R.S., Herd, E.P.K., and Duke, J., 2008, Anatomy of a young impact event in central Alberta: Prospects for the 'missing' Holocene impact record: *Geology*, 36, 955-958.
- R Lakeman, T.R., Clague, J.J., Menounos, B., Osborn, G.D., Jensen, B.J.L., and Froese, D.G. 2008, Holocene tephra in lake cores from northern British Columbia: *Canadian Journal of Earth Sciences*. 45, 935-947.
- R Livingston, J., Smith, D.G., Froese, D.G., and Hugenholtz, C., 2008, Floodplain stratigraphy of the ice jam dominated middle Yukon River: a new approach to longterm flood frequency: *Hydrological Processes*. 23, 357-371. DOI: 10.1002/hyp.7106
- R Ward, B.C., Bond, J.D., Froese, D.G., and Jensen, B.J.L., 2008, Old Crow tephra ( $140 \pm 10$  ka) constrains penultimate Reid glaciation in central Yukon Territory: *Quaternary Science Reviews*, 27, 1909-1915.
- R Dubruyne, R., Chu, G., King, C., Bos, K., Kuch, M., Schwarz, C., Szpak, P., Grocke, D., Matheus, P., Zazula, G., Guthrie, D., Froese, D., Buigues, B., De Marliave, C., Flemming, C., Poinar, D., Fisher, D., Southon, D., Tikhonov, A.N., Macphee, R.D.E., and Poinar, H. 2008. Out of America: Ancient DNA evidence for a new world origin of late Quaternary Woolly Mammoths: *Current Biology*, 18, 1320-1326.
- R Demuro, M., Roberts, R. G., Froese, D. G., Arnold, L. J., Brock, F., and Ramsey, C. B. 2008. Optically stimulated luminescence dating of single and multiple grains of quartz from perennially frozen loess in western Yukon Territory, Canada: Comparison with radiocarbon chronologies for the late Pleistocene Dawson tephra. *Quaternary Geochronology* 3, 346-364.
- R Jensen, B. J. L., Froese, D. G., Preece, S. J., Westgate, J. A., and Stachel, T., 2008. An extensive middle to late Pleistocene tephrochronologic record from east-central Alaska: *Quaternary Science Reviews* 27, 411-427.
- R Westgate, J. A., Preece, S. J., Froese, D. G., Pearce, N. J. G., Roberts, R. G., Demuro, M., Hart, W. K., and Perkins, W., 2008. Changing ideas on the identity and stratigraphic significance of the Sheep Creek tephra beds in Alaska and the Yukon Territory, northwestern North America: *Quaternary International* 178, 183-209.
- R Johnson, S.S., Hebsgaard, M.B., Christensen, T.R., Mastepanov, M., Nielsen, R., Munch, K., Brand, T., Gilbert, M.T.P., Zuber, M.T., Bunce, M., Ronn, R., Gilichinsky, D., Froese, D., and Willerslev, E., 2007. Ancient bacteria show evidence of DNA repair: *Proceedings of the National Academy of Sciences of the United States of America* 104, p. 14401-14405.
- R Robinson, S., Beaudoin, A. B., Froese, D. G., Doubt, J., and Clague, J. J., 2007. Plant macrofossils associated with an early Holocene beaver dam in interior Alaska: *Arctic* 60, 430-438. (MSc. Thesis Research of S. Robinson)
- R Wooller, M.J., Zazula, G.D., Edwards, M., Froese, D.G., Boone, R.D., Parker, C., and Bennett, B. 2007. Stable Carbon Isotope Compositions of Eastern Beringian Grasses and Sedges: Investigating Their Potential as Paleoenviromental Indicators. *Arctic, Antarctic, and Alpine Research* 39, 318-331.

- R Zazula, G.D., Froese, D.G., Elias, S.A., Kuzmina, S., and Mathewes, R.W. 2007. Arctic ground squirrels of the mammoth-steppe: paleoecology of Late Pleistocene middens (~24 000-29 450 14C yr BP), Yukon Territory, Canada: *Quaternary Science Reviews* 26, 979-1003.
- R Froese, D.G., Zazula, G.D., and Reyes, A.V., 2006. Seasonality of the late Pleistocene Dawson tephra and the exceptional preservation of a buried riparian surface in central Yukon Territory: *Quaternary Science Reviews* 25, p. 1542-1551.
- R Sanborn, P.T., Smith, C.A.S., Froese, D.G., and Zazula, G.D., and Westgate, J.A., 2006. Full-glacial paleosols in perennially frozen loess sequences, Klondike goldfields, Yukon Territory, Canada: *Quaternary Research* 66, p. 147-157.

## 2. Other Research Contributions

Since 2005 I have been working with the Vuntut Gwitchin First Nation (and Government) on projects associated with environmental change in their traditional lands of northern Yukon. This work includes a community-based paleontology program which takes Gwitchin youth from the community into their traditional lands to collect fossils, and more recently a collaborative research project with the VGFN for the International Polar Year. This latter project involved a group of ten researchers ranging from community health to permafrost and Quaternary geology and palaeontology to look at issues associated with rapid changes in their traditional lands. In this project, the community set the research objective, and in fact, applied for the research money through the Government of Canada IPY program. One of the considerable objectives has been longterm training and capacity development. Recently, the community has taken an even stronger interest in this area, leading to a subsequent (successful) infrastructure grant to build community facilities to curate fossils collected in their traditional lands, and repatriate fossil collections to the village of Old Crow.

## 3. Most Significant Career Research Contributions

### *The steppe- tundra debate and composition of the ‘mammoth-steppe’*

One of our substantive contributions has been to contribute new proxies and understanding of the steppe-tundra debate and composition of the ‘mammoth-steppe’, the environment that characterized NW North America at the time of human colonization. With PhD student Grant Zazula, we provided new data on a longstanding debate about the nature of the full-glacial vegetation of this region utilizing new ecological indicators, novel dating approaches from ground squirrel middens and have largely settled this debate (*e.g.* Froese et al., 2009b, 2006; Zazula et al., 2007, 2005).

### *Environmental Change in Arctic North America from sedimentary records*

I have been leading a diverse program in NW Canada since 1995 to establish a regional stratigraphic/tephrochronologic framework for the western Arctic, in particular using field exposures in the Klondike area of central Yukon. This area has evolved into a key region of the circum-Arctic for these studies through the combination of large accessible exposures associated with relict permafrost, permafrost-preserved plant and vertebrate fossils, and the ability to readily establish independent chronology through the interbedded tephra. (Froese et al., 2008, *Science*, 324)

## 4. Career Interruptions and Special Circumstances   None.

## 5. Contributions to Training (Currently 2 PDF, 4 PhD (2 co-supervised) 2 MSc.)

- Dr. Svetlana Kuzmina, Postdoctoral Fellow (IPY) *Fossil insects and impacts of warmer climates of the past on the Arctic system (Interglacial analogues to future warming)*
- Dr. Fabrice Calmels, Postdoctoral Fellow (NSERC PDF Award Holder) *Permafrost dynamics*
- Britta Jensen, PhD. *Quaternary stratigraphy and tephrochronology of middle Pleistocene interglaciations in central Yukon and Alaska* May 2007-.
- Robin Woywitka, PhD. Quaternary geology and geoarchaeology of the Oil Sands Region, NE Alberta
- Elizabeth Hall, MSc. Candidate *Biostratigraphy and paleoenvironments of Old Crow Flats interglacial beds (May 2007-)*

#### Co-Supervision

- Michelle Hanson, PhD. Candidate, Department of Earth Sciences, Simon Fraser University *Correlation and dating of glacial Lake Missoula and the Channeled Scablands of Washington State* (Sept 2006- ; co-supervised with J. Clague, SFU)
- Derek Turner, PhD Candidate, Department of Earth Sciences, Simon Fraser University, *Quaternary stratigraphy and tephrochronology of the upper White River and Kluane area, Yukon Territory* (September 2008- ; co-supervised with B. Ward, SFU)
- Véronique Germain , MSc. Candidate, Département des sciences de la terre et de l'atmosphère *OSL dating of Late Pleistocene sandsheets along middle Yukon River* (January 2008- ; co-supervised with M. Lamothe, Université du Québec à Montréal)

#### Former Lab Members (not including 5 BSc Honours theses)

- Dr. Steven Kuehn, Postdoctoral Fellow (Alberta Ingenuity) *Major and trace element characterization of distal glass shards and tephrochronology of Mt. Logan Ice Core.* (Presently on faculty Department of Geology, Washington and Lee University, Virginia, USA)
- Dr. Grant Zazula, PhD. 2006 (Simon Fraser University, Biology) *Paleoecology of late Pleistocene arctic ground squirrel middens and glacial environments of west-central Yukon Territory.* Supervisory committee (Co-Supervision with R.W. Matthewes, SFU Biology). (Presently Yukon Palaeontologist, Government of Yukon)
- Dr. Alberto Reyes, Ph.D. 2010 *Climate and permafrost degradation during the last interglaciation in Yukon and Alaska* (Presently PDF, University of Wisconsin, Madison)
- Hayley Dunning, MSc. 2011. *Tephrochronology of SE Alaska and Mount Logan Ice Core.* (Presently School of Journalism, UBC)
- Britta Jensen, MSc. *Tephrochronology of middle-to-late Pleistocene loess in interior Alaska* April 2007. NSERC CGS, AIF Scholarships and Awards (PhD. Candidate, EAS U of A)
- Kristen Kennedy, MSc. *Eagle River meltwater channel and timing of NW Laurentide Maximum, northern Yukon Territory* January 2008. (Project Geologist, Yukon Geological Survey)
- Simon Robinson, MSc. Candidate *Late glacial-early Holocene climate of interior Alaska from plant macrofossils* May 2007. (ERM Consulting, Bristol, U.K.)
- Michael Davies, MSc. Candidate *Debris flow hazard evaluation in the Mt. Klapperhorn area, BC.* September 2007. (Engineering geologist, Bruce Geotechnical, Edmonton)

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Internal use	CID (if known)
359587	204832

**Identification**

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

**Name**

Family name	Given name	Initials	Title
Janetski	Joel	C	Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
			UNITED STATES	<input type="radio"/> Yes <input type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1942	<input type="radio"/> F <input checked="" type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
011	801	422-6111		011	801	319-0542	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
011	801	422-0021					
Primary E-mail joel_janetski@byu.edu							
Secondary E-mail							

**Checked**

Web CV

2011/09/28

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**

**Do not photocopy this page.**

Family name, Given name

Janetski, Joel

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address 276 North 2520 West			Address    		
City/Municipality Provo	Prov. / State UT	Postal/Zip code 84601	City/Municipality	Prov. / State	Postal/Zip code
Country UNITED STATES			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address    			Address    		
City/Municipality	Prov./ State		City/Municipality	Prov./ State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)		Temporary telephone/fax number Country code    Area code    Number    Extension		
Temporary E-mail					

Family name, Given name

Janetski, Joel

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	214	Global/Climate Change
2	240	Indigenous peoples
3		

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>1200 BC AD</p> <p>400 <input checked="" type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>1700 BC AD</p> <p>1300 <input type="radio"/> <input checked="" type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2	6500	Southwest Asia
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1	1200	UNITED STATES	UT
2	1200	UNITED STATES	AZ
3	6507	JORDAN	
4			
5			

Family name, Given name

Janetski, Joel

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Full Professor				1989/9
Org. code	Full organization name			
9977102	Brigham Young University			
Department/Division name				
Anthropology				
Position type	<input checked="" type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Director			1984/9	1995/9
Org. code	Full organization name			
9977102	Brigham Young University			
Department/Division name				
Museum of Peoples and Cultures				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/division name				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/Division name				



Janetski, Joel

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate	Doctor of Philosophy	1978/09		1983/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60414	Hunters and Gatherers	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9977101	University of Utah			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1974/09		1977/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60402	Archaeology - General: Theory and Method	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9977101	University of Utah			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

Janetski, Joel

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Honorary Position	Fellow Utah Historical Society	UNITED STATES		2007
Professional Designation	Achievement in Sponsored Research	UNITED STATES		\$0 2005
Professional Designation	Wesley P. Lloyd award for graduate ed	UNITED STATES		\$0 2003
Academic Prize	Dale Morgan award, scholarly article	UNITED STATES		\$0 1991
Honorary Position	Fellow Utah Professional Archaeological Council	UNITED STATES		\$0 1990

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Hunter-gatherers, small scale farmers, trade, zooarchaeology

## Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60414	Hunters and Gatherers	
2	60422	Origins and Development of Agriculture	
3	60432	Trade and Trade Routes, Culture Contact, Cultural Relations	
4	60420	Methods and Techniques	
5			

Family name, Given name

Janetski, Joel

## Funded Research

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	National Science Foundation	2008	\$88,000
Role	Applicant		Completion status <input type="checkbox"/> Complete
Project title	Late Pleistocene/Early Holocene Archaeology at North Creek Shelter, Escalante Valley, Southern Utah		
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	National Science Foundation	2007	\$103,000
Role	Co-applicant		Completion status <input type="checkbox"/> Complete
Project title	Grand Gulch Basketmaker: Stable Isotope Chemistry, AMS Radiocarbon dating and Documentation of Burial Context		
Applicant's family name		Applicant's given name	Initials
Coltrain		Joan	B
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Nnational Geograpic Society	2004	\$20,000
Role	Applicant		Completion status <input checked="" type="checkbox"/> Complete
Project title	Natufian Archaeology in the Petra Basin of Southern Jordan		
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role			Completion status <input type="checkbox"/> Complete
Project title			
Applicant's family name		Applicant's given name	Initials

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

**1. Research Contributions over the Last Six Years**

**A. Refereed Contributions**

- R** Janetski, J. D., D. T. Yoder, M. Bodily, and B. E. Newbold . 2011. Deep Human History in the Escalante Valley of Southern Utah. *Utah Historical Quarterly* 79 (3):204-223. 80%
- R** Baadsgaard, Aubrey, J. C. Janetski, M. Chazan, and L. S. Cummings. 2010. Natufian Strategy Shifts: Evidences from Watdi Mataha 2, Petra, Jordan. *Eurasian Prehistory* 7(1): 7-27. 60%
- R** Janetski, J. C. 2008. The Enigmatic Fremont. In *The Great Basin: People and Place in Ancient Times*, edited by Catherine S. Fowler and Don D. Fowler, pp. 105-116. School of Advanced Research Press, Santa Fe.
- R** Jantski, J. C. 2010. *Archaeology and Native American at Fish Lake, Central Utah*. Occasional Papers No. 16. Museum of Peoples and Cultures, Brigham Young University, Provo.
- R** Coltrain, J. B., Janetski, J. C., and S. W. Carlyle. 2007. The Stable-and Radio-Isotope Chemistry of Western Basketmaker Burials: Implications for Early Puebloan Diets and Origins. *American Antiquity* 72:301-321. 40%
- R** Janetski, J. C., 2007. Great Basin Animals. In *Environments, Origins, and Populations*, edited by B. H. Ubelaker and B. D. Smith, pp351-364. Smithsonian Handbook of North American Indians, Vol. 3. W. C. Sturtevant, general editor. Smithsonian Institution Press, Washington DC.
- R** Janetski, J. C., 2006 Mosquito Willie (42TO137): A Late Archaic Site on the Western Edge of the Great Salt Lake Desert. *Journal of California and Great Basin Anthropology* 26(1):75-92.

**B. Other Refereed Contributions**

- R** Janetski, J. C. 2011. Animal Use in the Great Basin of North America. In *The Subsistence Economies of Indigenous North American Societies*, edited by Bruce D. Smith, pp. 271-305. Smithsonian Institution Scholarly Publications, Washington DC.
- R** Janetski, J. C., R. E. Hughes. 2010. Two Fluted Points from Fish Lake, Central Utah. *Current Research in the Pleistocene* 27:100-101. (50%)
- R** Yoder, D. T., Janetski, J. C., Mark Bodily, Sara Hill, and Bradley E. Newbold . 2010. The Onset of Small Seed Processing on the Colorado Plateau. *Kiva* 74(4):425-446. 30%
- R** Janetski, J. C., and G. C. Smith. 2007. *Hunter-Gatherer Archaeology in Utah Valley*. Occasional Papers No. 12. Museum of Peoples and Cultures, Brigham Young University. 80%
- R** Janetski, J. C., L. Kreutzer, R. K. Talbot, L. D. Richens, and S. A. Baker. 2005. *Life on the Edge: Archaeology in Capitol Reef National Park*. Museum of Peoples and Cultures Occasional Papers No. 11. Brigham Young University, Provo. 20%
- R** Janetski, J. C., 2005. Shifts in Epipaleolithic Marine Shell Exploitation at Wadi Mataha, Southern Jordan. In *Archaeomalacology: Molluscs in Former Environments of Human Behavior*, edited by Daniella E. Bar-Yosef Mayer, pp. 148-158. Oxbow Books, Oxford.
- R** Janetski, J. C., J. T. Stock, S. K. Pheiffer, M. Chazan. 2005. F-81 Skeleton from Wadi Mataha, Jordan, and its Bearing on Human Variability in the Epipaleolithic of the Levant. *American Journal of Physical Anthropology* 128(2):453-465. 20%

**C. Non-Refereed Contributions/Presentations**

- Janetski, J. C. 2010. A Closer Look: Intra-site Spatial Patterning and Its Implications for Fremont. Paper presented at the Great Basin Anthropological Conference, Layton, Utah, October 19-23.
- Janetski, J. C. 2010. Fremont Genesis: A Basketmaker Perspective. Invited paper presented in the Plenary session, Great Basin Anthropological Conference, Layton, Utah, October 19-23.
- Jantski, J. C., and J. B. Coltrain. 2010. New Dietary and Temporal Data on Basketmaker II Remains from Southeastern Utah. Invited paper presented at the 75<sup>th</sup> Annual Meeting of the Society for American Archaeology, St Louis, Missouri, April 14-18, 2010.
- Jantski, J. C. 2010. Invited discussant for the symposium entitled "Celebrating A Decade of Discovery, Archaeology, Heritage Education, and Outreach on the Bureau of Land Management's National Landscape Conservation System" at the 75<sup>th</sup> Annual Meeting of the Society for American Archaeology, St Louis, Missouri, April 14-18, 2010.
- Janetski, J. C. 2009. Promontory Archaeology. Invited paper presented at the Dene Migration Symposium hosted by the Tsuut'ina Gunaha Institute and the University of Alberta, Calgary, Alberta, September 25<sup>th</sup>, -27<sup>th</sup>
- Janetski, J.C., D. Yoder, M. Bodily, B. Newbold, and S. Hill, 2008, The Onset of Small Seed Processing on the Colorado Plateau: Insights from North Creek Shelter. Paper presented at the 31<sup>st</sup> Great Basin Anthropological Conference, Portland, Oregon. 40%
- Janetski, J. C., 2008, Fremont - Anasazi Boundary Maintenance and Permeability in the Escalante Drainage. Paper presented at the 31<sup>st</sup> Great Basin Anthropological Conference, Portland, Oregon.
- Janetski, J. C., 2006 A Fremont Retrospective. Invited paper presented in "Past Present and Future Issues in Great Basin Archaeology: Papers in Honor of Don D. Fowler" symposium at the Great Basin Anthropological Conference, Las Vegas, October 19-21.
- Janetski, J. C., 2005 Human Use of Utah Lake Prior to Anglo Settlement. Invited paper presented at the Utah Lake Symposium, Utah Valley State College, Orem, September 22, 2005.
- Janetski, J. C., 2004. Native Americans and the Great Basin Landscape, Invited paper presented at the 57<sup>th</sup> Annual Meeting of the Society for Range Management, Salt Lake City, January 26, 2004

**D. Forthcoming Contributions**

- R** Janetski, J. C., L. D. Richens, R. K. Talbot. In press. Fremont - Anasazi Boundary Maintenance and Permeability in the Escalante Drainage. In *Meetings at the Margins: Prehistoric Cultural Interactions in the Intermountain West*, edited by David Rhode. University of Utah Press, Salt Lake City. 60%
- R** Janetski, J. C., C. B. Jardine, C. N. Watkins. In press. Interaction and Exchange in Fremont Society. In press In *Perspectives on Prehistoric Trade and Exchange in California and the Great Basin*, edited by Richard E. Hughes. University of Utah Press, Salt Lake City. 40%

- R** Newbold, B. E., Janetski, J. C., David T. Yoder, Mark Bodily. In press. Early Holocene Turkey (*Meleagris gallopavo*) Remains from Southern Utah: Implications for the Origins of the Puebloan Domestic Turkeys. *Kiva*. 80%
- R** Janetski, J. C., D. T. Yoder, M. Bodily, and B. E. Newbold. In press. Paleoarchaic to Early Archaic Transition on the Colorado Plateau: The Archaeology of North Creek Shelter. *American Antiquity*. 80%
- R** Janetski, J. C., and C. Thompson. In Press. Changing Puebloan Subsistence: the View from Montezuma Canyon. In *An Archaeological Legacy: Essays in Honor of Ray T. Matheny*, edited by D. G. Matheny, G. N. Grimm, and J. C. Janetski. Occasional Papers, Museum of Peoples and Cultures, Brigham Young University, Provo. 80%

### **3. Most Significant Career Research Contributions**

- R** Coltrain, J. B., J. C. Janetski, S. W. Carlyle. 2007. The Stable-and Radio-Isotope Chemistry of Western Basketmaker Burials: Implications for Early Puebloan Diets and Origins. *American Antiquity* 72:301-321. 40%
- R** Janetski, J. C., 2002. Trade in Fremont Society: Contexts and Contrasts, *Journal of Anthropological Archaeology* 21(3):344-370.
- R** Janetski, J. C., 2002. *Indians in Yellowstone*, revised edition, University of Utah Press, Salt Lake City.
- R** Janetski, J. C., 1997. Fremont Hunting and Resource Intensification in the Eastern Great Basin. *Journal of Archaeological Science* 24:1075-1088.
- R** Janetski, J. C., 1994. Recent Transitions in the Eastern Great Basin: The Archaeological Record. In *Across the West: Human Population Movement and the Expansion of the Numa*, edited by D. B. Madsen and D. Rhode, pp. 157-178. Anthropological Papers. University of Utah Press, Salt Lake City.

### **4. Career Interruptions (none)**

### **5. Contributions to Training over the Last Six Year (MA only at BYU)**

#### **PhD (Current)**

C. Cole. *Prehistoric Archaeology in North Meadow Valley Wash, Eastern Nevada*. University of California, Davis. (Committee Member)

R. Nash. *The Role of Maize in Low-Level Food Production Economies of Northeastern Utah* (Current, Committee Member, Candidacy Examiner, 2008)

#### **MA (Completed only)**

A. Woods. *Distribution, Function, and Value of Parowan Valley Projectile Points*. (Committee Chair, 2009)

M. Bodily. *Residential Mobility of Paleoarchaic and Early Archaic Occupants of North Creek Shelter (42GA65863): An Analysis of Chipped Stone Artifacts*. (Committee Chair, 2009)

D. Harris. *Fremont Distribution in the Upper Escalante Drainage*. (Committee Chair, 2009)

B. E. Newbold. *Paleoindian Lifeways of Paleoarchaic Peoples: A Faunal Analysis of Early Occupations at North Creek Shelter, Utah*. (Committee Chair, 2009)

JANETSKI, Joel C.

- M. Hall. *Parowan Valley Gaming Pieces and Insights into Fremont Social Organization*. (Committee Chair, 2008)
- B. Friel. *Short Term Military Camps on the Carter Road: A Functional Analysis*. (Committee Chair, 2008)
- C. Jardine. *Fremont Finery: Exchange and Distribution of Turquoise and Olivella Ornaments in Parowan Valley and Beyond*. (Committee Chair, 2007)
- C. Watkins. *Parowan Pottery and Fremont Complexity: Late Formative Ceramic Production and Exchange*. (Committee Chair, 2006)
- D. T. Yoder, *Storage and Mobility Among the Fremont: Changing Forms Through Time* . (Committee Chair, 2005) .
- .

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Internal use	CID (if known)
957349	204840

**Identification**

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

**Name**

Family name	Given name	Initials	Title
Ramsey	Christopher	CB	Professor

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country)	Have you applied for permanent residency?
			UNITED KINGDOM	<input type="radio"/> Yes <input checked="" type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1962	<input type="radio"/> F <input checked="" type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
44	1865	285215					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail christopher.ramsey@rlaha.ox.ac.uk							
Secondary E-mail christopher.ramsey@me.com							

**Checked**

Web CV

2011/09/26

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**



**Do not photocopy this page.**

Family name, Given name

Ramsey, Christopher

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address Research Laboratory for Archaeology and the History of Art Dyson Perrins Building South Parks Road, Oxford OX1 3QY			Address    		
			City/Municipality	Prov. / State	Postal/Zip code
Country UNITED KINGDOM			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address    			Address    		
City/Municipality		Prov. / State	City/Municipality		Prov. / State
Country			Country		
Start date (yyyy/mm/dd)		End date (yyyy/mm/dd)	Temporary telephone/fax number Country code    Area code    Number    Extension		
Temporary E-mail					

Family name, Given name

Ramsey, Christopher

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	214	Global/Climate Change
2	360	Science and technology
3	180	Environment and Sustainability

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>50000 BC AD</p> <p><input checked="" type="radio"/> <input type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>2009 BC AD</p> <p><input type="radio"/> <input checked="" type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	3000	Europe
2	9001	International
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1	3225	UNITED KINGDOM	
2	5103	EGYPT	
3	3205	FRANCE	
4	6203	JAPAN	
5			

Family name, Given name
Ramsey, Christopher

## Curriculum Vitae

### Language Proficiency

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

### Work Experience

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position		Start date (yyyy/mm)
Full Professor		2006/9
Org. code	Full organization name	
9121131	University of Oxford	
Department/Division name		
Research Laboratory for Archaeology and the History of Art		
Position type	Employment status	
<input checked="" type="radio"/> Tenured <input type="radio"/> Non-tenure <input type="radio"/> Tenure-track <input type="radio"/> Non-academic	<input checked="" type="radio"/> Full-time <input type="radio"/> Part-time <input type="radio"/> Non-salaried <input type="radio"/> Leave of absence	
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Director	2003/9	
Org. code	Full organization name	
9121131	University of Oxford	
Department/Division name		
Oxford Radiocarbon Accelerator Uni		
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Lecturer	1999/9	2006/9
Org. code	Full organization name	
9121131	University of Oxford	
Department/division name		
Research Laboratory for Archaeology and the History of Art		
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Researcher	1987/9	1999/9
Org. code	Full organization name	
9121131	University of Oxford	
Department/Division name		
Research Laboratory for Archaeology and the History of Art		

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

Family name, Given name  
Ramsey, Christopher

## Work Experience (cont'd)

Position		Start date (yyyy/mm)	End date (yyyy/mm)
College Lecturer		1985/9	
Org. code	Full organization name		
9121131	University of Oxford		
Department/Division name			
Merton College			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			

Family name, Given name

Ramsey, Christopher

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate	DPhil	1983/10		1987/08
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80400	Physics	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121131	University of Oxford			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's	MA (Oxon)	1980/10		1987/08
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80400	Physics	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121131	University of Oxford			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.	BA Natural Sciences	1980/10		1983/08
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80400	Physics	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121131	University of Oxford			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name  
Ramsey, Christopher

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Undergraduate Scholarship	Postmastership, Merton College	University UNITED KINGDOM	36	\$0 1980

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Dating; Statistics; Mass Spectrometry; Prehistory; Radiocarbon; Quaternary Science

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60400	Archaeology	
2	80400	Physics	
3	80500	Earth Sciences	
4	80100	Mathematics	
5			

Family name, Given name  
Ramsey, Christopher

## Funded Research

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	NERC	2010	\$177,740
Role	Co-applicant	Completion status <input type="checkbox"/> Complete	
Project title	Towards a Decadally-Resolved Radiocarbon Calibration for the Last Glacial Period Using New Zealand Kauri		
Applicant's family name	Applicant's given name	Initials	
Turney	Christopher		
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	NERC (UK)	2008	\$1,433,000
Role	Co-applicant	Completion status <input type="checkbox"/> Complete	
Project title	: RESET: RESponse of humans to abrupt Environmental Transitions		
Applicant's family name	Applicant's given name	Initials	
Lowe	John	J	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	NERC (UK)	2008	\$1,897,000
Role	Applicant	Completion status <input type="checkbox"/> Complete	
Project title	Funding for the Oxford node of the ?NERC RadioCarbon Facility?		
Applicant's family name	Applicant's given name	Initials	
Nakagawa	Takeshi	T	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	NERC (UK)	2008	\$169,000
Role	Co-applicant	Completion status <input type="checkbox"/> Complete	
Project title	Lake Suigetsu varved sediment project: terrestrial radiocarbon calibration model and inter-regional comparison of climate changes		
Applicant's family name	Applicant's given name	Initials	
Nakagawa	Takeshi	T	

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Family name, Given name  
Ramsey, Christopher

<b>Funded Research (cont'd)</b>			
Org. code 1	Full name of funding organization NERC (UK)	Year awarded (yyyy) 2006	Total amount (CAN\$) \$554,000
Role Co-applicant		Completion status <input type="checkbox"/> Complete	
Project title Dating of the Middle-Upper Palaeolithic transition in western Europe using ultrafiltration AMS radiocarbon			
Applicant's family name Higham		Applicant's given name Tom	
		Initials TFG	
Org. code 1	Full name of funding organization Leverhulme Trust (UK)	Year awarded (yyyy) 2006	Total amount (CAN\$) \$423,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Synchronising absolute scientific dating and the Egyptian			
Applicant's family name Christopher Ramsey		Applicant's given name Christopher	
		Initials	
Org. code 1	Full name of funding organization NERC (UK)	Year awarded (yyyy) 2005	Total amount (CAN\$) \$743,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Funding for ?Oxford Radiocarbon Dating Service?, NERC facility			
Applicant's family name Christopher Ramsey		Applicant's given name Christopher	
		Initials	
Org. code 1	Full name of funding organization English Heritage	Year awarded (yyyy) 2004	Total amount (CAN\$) \$34,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Development of the OxCal program			
Applicant's family name Christopher Ramsey		Applicant's given name Christopher	
		Initials	

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV



## 1. Research Contributions over the past 6 years

### A. Refereed Contributions

- R** Bronk Ramsey, C., Dee, M., Rowland, J., Higham, T., Harris, S., Brock, F., Quiles, A., Wild, E., Marcus, E. & Shortland, A., (2010), Radiocarbon-Based Chronology for Dynastic Egypt, *Science*, 328,1554-1557.
- R** Brock, F., Higham, T.F.G., Ditchfield, P. & Bronk Ramsey, C., (2010), Current pretreatment methods for AMS radiocarbon dating at the Oxford Radiocarbon Accelerator Unit (ORAU), *Radiocarbon*, **52(1)**,103-112
- R** Dee, M.W., Brock, F., Harris, S.A., Bronk Ramsey, C., Shortland, A.J., Higham, T.F.G. & Rowland, J.M., (2010), Investigating the likelihood of a reservoir offset in the radiocarbon record for ancient Egypt, *Journal of Archaeological Science*, **37**,687-693
- R** Rasmussen M., Li, Y., Lindgren, S. ...., Higham, T.F.G, Bronk Ramsey, C. *et.al.* , (2010), Ancient human genome sequence of an extinct Palaeo-Eskimo, *Nature*, **463**,757-762
- R** Reimer, P.J., Baillie, M.G.L., Bard, E., Bayliss, A., Beck, J.W., Blackwell, P.G., Bronk Ramsey, C., Buck, C.E., Burr, G.S., Edwards, R.L., Friedrich, M., Grootes, P.M., Guilderson, T.P., Hajdas, I., Heaton, T.J., Hogg, A.G., Hughen, K.A., Kaiser, K.F., Kromer, B., McCormac, F.G., Manning, S.W., Reimer, R.W., Richards, D.A., Southon, J.R., Talamo, S., Turney, C.S.M., van der Plicht, J. & (2009), IntCal09 and Marine09 Radiocarbon Age Calibration Curves, 0–50,000 Years cal BP, *Radiocarbon*, **51(4)**,1111-1150
- R** Hogg, A., Bronk Ramsey, C., Turney, C. & Palmer, J., (2009), Bayesian evaluation of the Southern Hemisphere Radiocarbon Offset during the Holocene, *Radiocarbon*, **51(4)**,1165-1176
- R** Higham, T.F.G, Barton, H., Turney, C.M.T., Barker, G., Bronk Ramsey, C., & Brock, F., (2009), Radiocarbon dating of charcoal from tropical sequences: Results from the Niah Great Cave, Sarawak and their broader implications, *Journal of Quaternary Science*, **24(2)**,189-197
- R** Bronk Ramsey, C., (2009), Dealing with outliers and offsets in radiocarbon dating, *Radiocarbon*, **51(3)**,1023-1045
- R** Bronk Ramsey, C., Bayesian analysis of radiocarbon dates, (2009), *Radiocarbon*, 51(1), 337-360.
- R** DeMuro, M., Roberts, R.G., Froese, D.G., Arnold, L.J., Brock, F. & Bronk Ramsey, C., (2008), Optically stimulated luminescence dating of single and multiple grains of quartz from perennially-frozen loess in western Yukon Territory, Canada: Comparison with radiocarbon chronologies for the late Pleistocene Dawson tephra, *Quaternary Geochronology*, 3(4),346-364
- R** Bronk Ramsey, C., (2008), Radiocarbon dating: revolutions in understanding, *Archaeometry*, 50(2),249-275
- R** Bronk Ramsey, C., (2008), Deposition models for chronological records, *Quaternary Science reviews*, 27,42-60
- R** Naysmith, P., Scott, E.M., Cook, G.T., Heinemeier, J, van der Plicht, J., Van Strydonck, M., Bronk Ramsey, C., Grootes, P.M. & Freeman, S.P.H.T., (2007), A cremated bone intercomparison study, *Radiocarbon*, 49(2),403-408
- R** Loveday, R., Gibson, A., Marshall, P.D., Bayliss, A., Bronk Ramsey, C. & van der Plicht, H., (2007), The antler maceheads dating project, *Proceedings of the Prehistoric Society*, 73,381-392
- R** Bayliss, A., Ramsey, C.B., van der Plicht, J. & Whittle, A., (2007), Bradshaw and Bayes: Towards a timetable for the Neolithic, *Cambridge Archaeological Journal*, 17(1),1-28
- R** Blockley, S.P.E., Blaauw, M., Bronk Ramsey, C. & van der Plicht, J., (2007), Building and testing age models for radiocarbon dates in Lateglacial and Early Holocene sediments, *Quaternary Science Reviews*, 26,1915-1926
- R** Mellars, P., Gravina, B & Bronk Ramsey, C., (2007), Confirmation of Neanderthal/modern human interstratification at the Châtelperronian type-site, *Proceedings of the National Academy of Sciences of the United States of America*, 104,3657-3662
- R** Bronk Ramsey, C., Buck, C.E., Manning, S.W., Reimer, P. & van der Plicht, H., (2006), Developments in radiocarbon calibration for archaeology, *Antiquity*, 80,783-798

- R Higham, T.F.G., Bronk Ramsey, C., Karavanic, I., Smith, F.H & Trinkaus, E., (2006), Revised direct radiocarbon dating of the Vindija G1 Upper Paleolithic Neandertals, *Proceedings of the National Academy of Sciences of the United States of America*, 103(3),553-557
- R Higham, T.F.G., Jacobi, R.M & Bronk Ramsey, C., (2006), AMS radiocarbon dating of ancient bone using ultrafiltration, *Radiocarbon*, 48(2),179-195
- R Jacobi, R.M, Higham, T.F.G. & Bronk Ramsey, C., (2006), AMS radiocarbon dating of Middle and Upper Palaeolithic bone in the British Isles: improved reliability using ultrafiltration, *Journal of Quaternary Science*, 21(5),557-573
- R Manning, S, Bronk Ramsey, C, Kutschera, W, Higham, T, Kromer, B, Steier, P, Wild, E, 2006, Chronology for the Aegean Late Bronze Age 1700-1400 B.C., *Science*, 312 (5773) 565 – 569.
- R Gravina, B, Mellars, P and Bronk Ramsey, C, 2005, AMS radiocarbon dating of interstratified Neanderthal and early Modern human occupations at the Chatelperronian type-site, *Nature*, 438(7064) 51-56.
- R Bronk Ramsey, C, Manning, SW, Galimberti, M, 2004, Dating the volcanic eruption at Thera, *Radiocarbon*, 46 (1) 325-344.
- R Bayliss, A, Shepherd Popescu, E, Beavan-Athfield, N, Bronk Ramsey, C, Cook, GT, Locker, A, 2004, The potential significance of dietary offsets for the interpretation of radiocarbon dates: an archaeologically significant example from medieval Norwich, *Journal of Archaeological Science*, 31, 563-575.
- R Higham, T.F.G., Hedges, R.E.M., Anderson, A.J., Bronk Ramsey, C., Fankhauser, B., 2004, Problems Associated with the AMS Dating of Small Bone Samples: The Question of the Arrival of Polynesian Rats to New Zealand, *Radiocarbon*, 46(1), 2004, 207-218.
- R Hughen, Konrad A., Baillie, Mike G.L., Bard, Edouard, Beck, J Warren, Bertrand, Chanda J.H., Blackwell, Paul G., Buck, Caitlin E., Burr, George S., Cutler, Kirsten B., Damon, Paul E., Edwards, Richard L., Fairbanks, Richard G., Friedrich, Michael, Guilderson, Thomas P., Kromer, Bernd, McCormac, Gerry, Manning, Sturt, Bronk Ramsey, Christopher, Reimer, Paula J., Reimer, Ron W., Remmele, Sabine, Southon, John R., Stuiver, Minze, Talamo, Sahra, Taylor, F.W., van der Plicht, Johannes, Weyhenmeyer, Constanze E., 2004, Marine04 Marine Radiocarbon Age Calibration, 0–26 Cal Kyr BP, *Radiocarbon*, 46(3), 1059-1086.
- R Reimer, Paula J., Baillie, Mike G.L., Bard, Edouard, Bayliss, Alex, Beck, J Warren, Bertrand, Chanda J.H., Blackwell, Paul G., Buck, Caitlin E., Burr, George S., Cutler, Kirsten B., Damon, Paul E., Edwards, R Lawrence, Fairbanks, Richard G., Friedrich, Michael, Guilderson, Thomas P., Hogg, Alan G., Hughen, Konrad A., Kromer, Bernd, McCormac, Gerry, Manning, Sturt, Bronk Ramsey, Christopher, Reimer, Ron W., Remmele, Sabine, Southon, John R., Stuiver, Minze, Talamo, Sahra, Taylor, F.W., van der Plicht, Johannes, Weyhenmeyer, Constanze E. ,2004, IntCal04 Terrestrial Radiocarbon Age Calibration, 0–26 Cal Kyr BP, *Radiocarbon*, 46(3), 1029-1058.

## B. Other Refereed Contributions (Refereed Conference Presentations)

- R Hamilton, W.D., Bayliss, A., Menuge, A., Bronk Ramsey, C. & Cook, G., (2007), ‘Rev Thomas Bayes: Get Ready to Wiggle’ — Bayesian modelling, radiocarbon wiggle-matching, and the North Wing of Baguley Hall, *Vernacular Architecture*, 38,87-97
- R Brock, F., Bronk Ramsey, C. & Higham, T.F.G., (2007), Quality assurance of ultrafiltered bone dating, *Radiocarbon*, 49(2),187-192.
- R Bronk Ramsey, C., Brenninkmeijer, C.A.M., Jöckel, P., Kjeldsen, H. & Masarik, J., (2007), Direct measurement of the radiocarbon production at altitude, *Nuclear Instruments and Methods in Physics Research B*, 259,558-564
- R Cuzange, M-T., Delqué-Kolic, E., Goszlar, T., Grootes, P.M., Higham, T., Kaltnecker, E., Nadeau, M.J., Oberlin, C., Paterne, M., van der Plicht, J., Bronk Ramsey, C., Valladas, H., Clottes, J. & Michel, J. & Genest, J.M, (2007), Radiocarbon intercomparison program for the Chauvet Cave, *Radiocarbon*, 49(2),339-47.
- R Bronk Ramsey, C, Higham, T, Leach, P, 2004, Towards high precision AMS: progress and limitations, *Radiocarbon*, 46 (1) 17-24.

- R Bronk Ramsey, C, Higham, T, Bowles, A, and Hedges, REM, 2004, Improvements to the pre-treatment of bone at Oxford, *Radiocarbon*, 46 (1) 155-164.
- R Bronk Ramsey, C., Ditchfield, P., Humm, M., 2004, Using a Gas Ion Source for Radiocarbon AMS and GC-AMS, *Radiocarbon*, 46(1), 25-32
- R Galimberti, M, Bronk Ramsey, C, Manning, SW, 2004, Wiggle-match dating of tree-ring sequences, *Radiocarbon*, 46 (2) 917-924.

## C. Non-refereed Contributions

### Articles

- Bronk Ramsey, C., (2006), New approaches to constructing age models: OxCal4, *PAGES News*, 14(3), 14-15

### Books

- Bayliss, A., Cook, G., Bronk Ramsey, C., van der Plicht, J. & McCormac, G., (2008), *Radiocarbon Dates - from samples funded by English Heritage under the Aggregates Levy Sustainability Fund 2004-7*, English Heritage
- Bayliss, A., Bronk Ramsey, C., Cook, G. & van der Plicht, J., (2007), *Radiocarbon Dates - from samples funded by English Heritage under the Aggregates Levy Sustainability Fund 2002-4*, English Heritage
- Bronk Ramsey, C. & Higham, T.F.G. (eds), (2007), - *Proceedings of the 19th International 14C conference*, *Radiocarbon*: 49(2)
- Bayliss, A., Bronk Ramsey, C., Cook, G. & van der Plicht, J., (2007), *Radiocarbon Dates - from samples funded by English Heritage under the Aggregates Levy Sustainability Fund 2002-4*, English Heritage
- Higham T., Bronk Ramsey C. and Owen, C. (eds) , 2004, *Radiocarbon and Archaeology*, Oxford University School of Archaeology Monograph, Oxford

## 2. Other Research Contributions

- Director, Oxford Radiocarbon Accelerator Unit, University of Oxford
- Editorial Board of *Radiocarbon* (international journal published by the University of Arizona)
- Editorial Board of *Quaternary Geochronology* (a new daughter journal of *Quaternary Science Reviews*, published by Elsevier)
- Member of the International Committee for Radiocarbon Calibration (IntCal)
- Author of the statistical package OxCal, widely used for the calibration and analysis of radiocarbon dates.

## 3. Most Significant Career Research Contributions

- R Bronk Ramsey, C., Dee, M., Rowland, J., Higham, T., Harris, S., Brock, F., Quiles, A., Wild, E., Marcus, E. & Shortland, A., (2010), *Radiocarbon-Based Chronology for Dynastic Egypt*, *Science*, 328, 1554-1557.  
A first attempt to provide a comprehensive, radiocarbon-based chronology for the dynastic period of Ancient Egypt.
- R Bronk Ramsey, C., Bayesian analysis of radiocarbon dates, (2009), *Radiocarbon*, 51(1), 337-360.  
Summarizes the use of Bayesian analysis in the interpretation and modeling of radiocarbon dates (50<sup>th</sup> Anniversary volume of *Radiocarbon*)
- R Bronk Ramsey, C., (2008), *Radiocarbon dating: revolutions in understanding*,

Archaeometry, 50(2),249-275.

Review of developments in radiocarbon dating, in particular in relation to Archaeology (50<sup>th</sup> Anniversary volume of Archaeometry)

- R** Bronk Ramsey, C., (2008), Deposition models for chronological records, Quaternary Science reviews, 27,42-60.

New approaches to using radiocarbon dates in sedimentary sequences

- R** Bronk Ramsey, C., Buck, C.E., Manning, S.W., Reimer, P. & van der Plicht, H., (2006), Developments in radiocarbon calibration for archaeology, Antiquity, 80,783-798.

Paper covering the impact and limitations of radiocarbon dating for Archaeology.

#### **4. Contributions to Training**

I have supervised the following doctoral students:

2010-	Amber Hood: DPhil in Archaeological Science
2008-	Sharen Lee: DPhil in Archaeological Science
2007-2011	Richard Staff: DPhil in Archaeological Science
2005-2009	Michael Dee: DPhil in Archaeological Science
2001-2005	Daniel Miles: DPhil in Archaeological Science (successfully completed in 4 years).

I am currently Director of Graduate Studies for Archaeology and the University of Oxford (2008-2011).

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Internal use	CID (if known)
770217	

**Identification**

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

**Name**

Family name	Given name	Initials	Title
Rhode	David		Professor

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country)	Have you applied for permanent residency?
			UNITED STATES	<input type="radio"/> Yes <input checked="" type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1956	<input type="radio"/> F <input checked="" type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
001	775	6737310					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
001	7756						
Primary E-mail dave.rhode@dri.edu							
Secondary E-mail							

**Checked**

Web CV

2011/09/30

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**

**Do not photocopy this page.**

Family name, Given name

Rhode, David

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address Desert Research Institute 2215 Raggio Parkway  			Address    		
City/Municipality Reno	Prov. / State NV	Postal/Zip code 89512	City/Municipality	Prov. / State	Postal/Zip code
Country UNITED STATES			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address    			Address    		
City/Municipality	Prov./ State		City/Municipality	Prov./ State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)		Temporary telephone/fax number Country code    Area code    Number    Extension		
Temporary E-mail					

Family name, Given name

Rhode, David

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	214	Global/Climate Change
2	180	Environment and Sustainability
3		

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>12000 BC AD</p> <p><input checked="" type="radio"/> <input type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>1900 BC AD</p> <p><input type="radio"/> <input checked="" type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1000	North America
2	6100	Central Asia
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1	1200	UNITED STATES	
2	6201	CHINA	
3			
4			
5			

Family name, Given name

Rhode, David

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Researcher				1989/3
Org. code	Full organization name			
1	Desert Research Institute			
Department/Division name				
Earth and Ecosystem Sciences				
Position type	<input type="radio"/> Tenured	<input checked="" type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time
	<input type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Part-time
				<input type="radio"/> Non-salaried
				<input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/Division name				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/division name				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/Division name				



**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1983/01		1987/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60299	Archaeology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9981101	University of Washington			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1979/09		1983/01
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9981101	University of Washington			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.		1975/09		1978/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80600	Biological Sciences	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9983102	University of California, Davis			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.		1975/09		1978/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9983102	University of California, Davis			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

Rhode, David

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

archaeology; paleoecology; archaeobotany; western North America; prehistory

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60410	Environmental Archaeology	
2	60424	Paleoanthropology, Ethnoarchaeology, Paleoethnology	
3	60414	Hunters and Gatherers	
4	80500	Earth Sciences	
5	80600	Biological Sciences	

Family name, Given name

Rhode, David

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	US Army	2011	\$800,000
Role Applicant		Completion status <input type="checkbox"/> Complete	
Project title Archaeological Services for US Army			
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	US Army	2010	\$800,000
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title Archaeological Services			
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	US National Science Foundation	2008	\$200,000
Role Co-applicant		Completion status <input type="checkbox"/> Complete	
Project title Prehistory of Tibetan Plateau			
Applicant's family name		Applicant's given name	Initials
Brantingham		Jeff	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role		Completion status <input type="checkbox"/> Complete	
Project title			
Applicant's family name		Applicant's given name	Initials

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

## 1. Research Contributions over the Last Six Years

### A. Refereed Contributions

- Goebel, T, B Hockett, KD Adams, D Rhode, and K Graf (2011). Climate, Environment, and Humans in North America's Great Basin During the Younger Dryas, 12,900-11,600 Calendar Years Ago. *Quaternary International* 242:479-501.
- Fowler, CS, and D Rhode (2011) Great Basin Plants. In *The Subsistence Economies of Indigenous North American Societies*, edited by BD Smith, pp. 233-270. Smithsonian Institution Scholarly Press, Washington, DC, in press.
- Benson, LV, SP Lund, JP Smoot, DE Rhode, RJ Spencer, KL Verosub, LA Louderback, CA Johnson, RO Rye, RM Negrini (2011). The Rise and Fall of Lake Bonneville between 45 and 10.5 ka. *Quaternary International* 235(1-2):57-69.
- Brantingham, PJ, D Rhode, and DB Madsen (2010). Archaeology Augments Tibet's Genetic History. Letter, *Science* 329, September 17 2010, p. 1467.
- Rhode, D, H Ma, DB Madsen, PJ Brantingham, SL Forman, and JW Olsen (2010). Paleoenvironmental and Archaeological Investigations at Qinghai Lake, Western China: Geomorphic and Chronometric Evidence of Lake Level History. *Quaternary International* 218:29-44.
- Louderback, LA, and D Rhode (2009). 15,000 Years of Vegetation Change in the Bonneville Basin: The Blue Lake Pollen Record. *Quaternary Science Reviews* 28:308-326.
- Rhode, D (2008). Dietary plant use by middle Holocene foragers in the Bonneville Basin, western North America. *Before Farming* [online version] 2008/3 article 2.
- Madsen, DB, H Ma, D Rhode, PJ Brantingham, and SL Forman (2008). Age Constraints on the Late Quaternary Evolution of Qinghai Lake, Tibetan Plateau. *Quaternary Research* 69(2):316-325.
- Rhode, D (2008). Development of Paleoenvironmental Research Methods. In *The Great Basin: People and Place in Ancient Times*, edited by CS Fowler and DD Fowler. SAR Press, Santa Fe.
- Adams, KD, T Goebel, K Graf, GM Smith, AJ Camp, RW Briggs, and D Rhode (2008). Late Pleistocene and Early Holocene Lake-Level Fluctuations in the Lahontan Basin, Nevada: Implications for the Distribution of Archaeological Sites. *Geoarchaeology* 23(5):608-643.
- Goebel, T, KE Graf, BS Hockett, and D Rhode (2007). The Paleoindian occupations at Bonneville Estates Rockshelter, Danger Cave, and Smith Creek Cave (Eastern Great Basin, U.S.A.): Interpreting their radiocarbon chronologies. Pp. 147-161 in *On Shelter's Ledge: Histories, Theories and Methods of Rockshelter Research*, edited by M Kornfeld, S Vasil'ev, and L Motti. BAR International Series 2007, Archaeopress, Oxford UK.
- Rhode, D, and LA Louderback (2007). Dietary Plant Use in the Bonneville Basin during the Terminal Pleistocene-Early Holocene Transition. Pp. 231-247 in *Paleoindian or Paleoarchaic? Great Basin Human Ecology at the Pleistocene-Holocene Transition*, edited by KE Graf and DN Schmitt. University of Utah Press, Salt Lake City.
- Rhode, D, H Zhang, DB Madsen, X Gao, PJ Brantingham, H Ma, and JW Olsen (2007). Epipaleolithic/Early Neolithic Settlements at Qinghai Lake, western China. *Journal of Archaeological Science* 34(4):600-612.
- Rhode, D, DB Madsen, PJ Brantingham, and T Dargye (2007). Yak, yak dung, and prehistoric human habitation of the Tibetan Plateau. Pp. 205-224 in *Late Quaternary Climate Change and Human Adaptation in Arid China*, edited by DB Madsen, F-H Chen, and X Gao. Developments in Quaternary Science volume 9, Elsevier, Amsterdam.
- Brantingham, PJ, X Gao, JW Olsen, H Ma, D Rhode, H Zhang, and DB Madsen (2007). A short chronology for the peopling of the Tibetan Plateau. Pp. 129-150 in *Late Quaternary Climate*

*Change and Human Adaptation in Arid China*, edited by DB Madsen, F-H Chen, and X Gao. Developments in Quaternary Science volume 9, Elsevier, Amsterdam.

- Rhode, D, DB Madsen, and KT Jones (2006). Antiquity of Early Holocene Small-Seed Consumption and Processing at Danger Cave. *Antiquity* 80 (308):328-339.
- Fowler, CS, and D Rhode (2006). Great Basin Plants. Pp. 331-350 in *Handbook of North America Indians, volume 3: Environment, Origins, and Population*, edited by D Ubelaker. Smithsonian Institution, Washington DC.
- Madsen, DB, H Ma, PJ Brantingham, X Gao, D Rhode, H Zhang, and JW Olsen (2006). The Late Upper Paleolithic Occupation of the Northern Tibetan Plateau Margin. *Journal of Archaeological Science* 33:1433-1444.

## **B. Other Refereed Contributions (Refereed Conference Presentations)**

- Rhode, D, D Schmitt, D Page, J Feathers, and R Quist, 2011. "Starch Grains, Luminescence Dates, and Bunny Bones from FCR Features at 42To567, Dugway Proving Ground, Utah," by. Poster presented at the Society for American Archaeology Annual Meeting, Sacramento, CA.
- Rhode, D, 2011. "How Did Small-Scale Societies Respond to Environmental Change in the Bonneville Basin, Western North America?" Poster presented at the "Past Climate, Landscapes, and Civilization" Chapman Conference, Santa Fe, NM.
- Rhode, D, DB Madsen, PJ Brantingham, and C Perrault, 2010. "Early Human Occupation on the Northeast Tibetan Plateau." Poster presented at the American Geophysical Union Annual Meeting, San Francisco, CA.
- Rhode, D, 2010. "Environmental Change and Human Occupation during the Pleistocene-Holocene Transition in the Great Basin." Invited Plenary presentation, American Quaternary Association Biennial Meeting, Laramie, WY.
- Rhode, D, 2010. "Early Holocene Subsistence Change in the Bonneville Basin." Society for American Archaeology Annual Meeting, St. Louis, MO.
- Rhode, D, H Ma, DB Madsen, PJ Brantingham, SL Forman, JW Olsen, and Z Lai, 2008. "Paleoenvironmental Implications of Shoreline Chronology of Qinghai Lake, Northeast Qinghai-Tibet Plateau." Poster presented at the American Geophysical Union Fall Meeting, San Francisco, CA.
- Louderback, LA, BS Hockett, D Rhode, KE Graf, and T Goebel, 2008. "Climate Change and Human Adaptation in the Bonneville Basin: The Blue Lake Pollen Record and Archaeology of Bonneville Estates Rockshelter." Society for American Archaeology Annual Meeting, Vancouver, BC.
- Rhode, D, 2008. "Middle Holocene Plant Use in the Bonneville Basin." Society for American Archaeology Annual Meeting, Vancouver, BC.
- Rhode, D, H Ma, DB Madsen, PJ Brantingham, and SL Forman, 2007. "Paleoenvironmental and Archaeological Investigations at Qinghai Lake, western China: Geomorphic and Chronometric Evidence of Lake Level History." 17th Congress of the International Union for Quaternary Research (INQUA), Cairns, Australia.
- Rhode, D, 2007. "Late Prehistoric Subsistence Change at High Elevations in the White Mountains, Eastern California: the Archaeobotanical Record." Poster presented at the Society for American Archaeology Annual Meeting, Austin, TX.
- Louderback, LA, and D Rhode, 2007. "Holocene Vegetation Change and Human Plant Use in the Northwest Bonneville Basin, Nevada/Utah." Poster presented at the Society for American Archaeology Annual Meeting, Austin, TX.

## **C. Non-refereed Contributions**

- Rhode, D, 2010. "Food Values and Return Rates for Limber Pine (*Pinus flexilis*).\" Poster presented at the Great Basin Anthropological Conference, Layton, Utah.

- Rhode, D, 2010. "Ancient People of the Desert West: Change and Adaptation in the Bonneville Basin." Invited Lecture, Time Travelers XVII Lecture Series, Royal Alberta Museum, Edmonton, Alberta, Canada.
- Rhode, D, 2010. "Early Peopling of the Northeast Tibetan Plateau." White Mountain Research Station Lecture Series, Bishop, CA.
- Rhode, D, 2010. "Paleoenvironmental Lessons for Sustainable Land Use at Lake Qinghai, Western China." Southern Methodist University Center for the Environment Inaugural Lecture, Dallas, TX.
- Rhode, D, 2009. "Environmental Change and Human Adaptations in the Bonneville Basin, ca. 12,000-8000 Years Ago." Invited Lecture, US DOE Nevada Test Site Community Environmental Monitoring Program Annual Meeting, Ely NV.
- Rhode, D, 2009. "Paleolithic Hunters on the Northeast Tibetan Plateau." Anthropological Lecture Series, University of Washington, Seattle, WA.
- Rhode, D, 2011. Integrated Cultural Resources Management Plan for US Army Yuma Proving Ground, Yuma AZ. Submitted to Environmental Directorate, US Army Yuma Proving Ground.
- Madsen, DB, D Rhode, LA Louderback, and M Metcalf, 2009. "Packrats, Pollen, and Pine II: The Flat Tops Pollen Records and Implications for Regional Millennial-Scale Climate Cycles." By Rocky Mountains Anthropological Conference, Gunnison, CO.
- Rhode, D, LA Louderback, DB Madsen, and M Metcalf, 2009. "Packrats, Pollen, and Pine I: Midden Evidence for Vegetation History in Northwest Colorado." Rocky Mountains Anthropological Conference, Gunnison, CO.
- Rhode, D, and LA Louderback, 2009. "Holocene Vegetation History in Northwest Colorado and Southwest Wyoming: Preliminary Results from Packrat Middens and Pollen Cores." PACLIM Conference, Asilomar, CA, 2009.
- Rhode, D, 2008. Human Remains from Camels Back Cave (42To392), Dugway Proving Ground, Tooele County, Utah: Description and Assessment of Cultural Affiliation. Submitted to US Army Dugway Proving Grounds, UT.
- Rhode, D, 2008. "Late Pleistocene-Holocene Vegetation Change in the Great Basin: Tools for the Paleo-Forester." Society of American Foresters Annual Meeting, Reno, NV.
- Rhode, D, 2006. "Prehistoric Dietary Plant Use in the Lead Mine Hills: the Record from Hearths and Other Features at Bonneville Estates Rockshelter." Great Basin Anthropological Conference, Las Vegas, NV.
- Craven, SL, and D Rhode, 2006. "Palynological Analysis of Sediments from the Bonneville Estates Rockshelter, Elko County, Nevada." Great Basin Anthropological Conference, Las Vegas, NV.
- Louderback, LA, and D Rhode, 2006. "Latest Pleistocene-Holocene Vegetation Change at Blue Lake, western Bonneville Basin, Utah." Great Basin Anthropological Conference, Las Vegas, NV.
- Goebel, T, BS Hockett, KE Graf, and D Rhode, 2006. "More on the Putative "Pre-Clovis" Human Occupation at Bonneville Estates Rockshelter." Great Basin Anthropological Conference, Las Vegas, NV.
- Goebel, T, BS Hockett, KE Graf, and D Rhode, 2006. "An Update on the Paleoindian Archaeology of Bonneville Estates Rockshelter, Eastern Nevada." Great Basin Anthropological Conference, Las Vegas, NV.

#### **D. Forthcoming Contributions**

- Rhode, D, in press. Introduction. In *Meetings at the Margins: Prehistoric Cultural Interactions in the Intermountain West*. University of Utah Press, Salt Lake City.
- Rhode, D, editor, in press. *Meetings at the Margins: Prehistoric Cultural Interactions in the Intermountain West*. University of Utah Press, Salt Lake City.

Rhode, D, 2011. Constraints on Long-Distance Movement of Plant Foods in the Great Basin. Chapter 11 (pp. 221-241) in *Perspectives on Prehistoric Trade and Exchange in California and the Great Basin*, edited by RE Hughes. University of Utah Press, Salt Lake City.

## **2. Other Research Contributions**

Organizer, “Beyond the Fringe: Archaeological Perspectives on Interactions between Great Basin Peoples and their Neighbors.” Symposium organized for the Great Basin Anthropological Conference, Portland, OR, 2008.

Co-organizer (with Ted Goebel), “Prehistory and Paleoecology of the Lead Mine Hills, Nevada-Utah.” Great Basin Anthropological Conference, Las Vegas, NV, 2006.

Technical Advisory Committee, Sustainable Development in Arid Lands Program, International Arid Lands Consortium, 2006-2010

Range Creek Advisory Group, University of Utah, 2007-2009

Co-Investigator, Tibetan Paleolithic Project, Qinghai Province, China (2001-2011), with P. Jeffrey Brantingham (UCLA) and David Madsen (U Texas)

## **3. Contributions to Training over the Last Six Years**

**Student Involvement in Research:** Although my position as Research Professor with the Desert Research Institute is a non-teaching position, over the past 20 years I have involved many students from the University of Nevada at Reno, University of Nevada at Las Vegas, the University of Washington, and other programs in my archaeological and paleoenvironmental research, both in the field and the lab. In addition, I have served on PhD and MA level graduate committees at all of these institutions in the departments of Anthropology and Hydrologic Sciences.

### **PhD**

Khaldoon Al-Qudah (UNR-Hydrologic Sciences, 2004)

Daron Duke (UNR-Anthropology, 2011)

Jill Gardner (UNLV-Anthropology, 2006)

Greg Haynes (UNR-Anthropology, 2004)

Lisbeth Louderback (UW-Anthropology, current)

Kelly Graf (UNR-Anthropology, 2008)

Teresa Wriston (UNR-Anthropology, current)

Brian Wygal (UNR-Anthropology, 2009)

### **MA**

Cassandra Albush (UNR-Anthropology, 2010)

Dayna Giambastiani (UNR-Anthropology, 2007)

Kelly Graf (UNLV-Anthropology, 2001)

Jonathan Grant (UNR-Anthropology, current)

Lisbeth Louderback (UNR-Anthropology, 2007)

David Page (UNR-Anthropology, 2008)

Anitra Sapula (MSc, Forensic Archaeology, University of Bradford, UK, 2010)

Tony Taylor (UNR-Anthropology, current)

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Internal use	CID (if known)
133497	60620

## Identification

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

### Name

Family name	Given name	Initials	Title
RICE	Sally	A	Dr.

### Citizenship - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input checked="" type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
		1991/04/30		<input type="radio"/> Yes <input type="radio"/> No

### Statistical and Administrative Information

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1956	<input checked="" type="radio"/> F <input type="radio"/> M	T6G2E7	<input checked="" type="radio"/> English <input type="radio"/> French	<input checked="" type="radio"/> Yes <input type="radio"/> No

Full name used during previous contact, if different from above

Sally A. Rice

## Contact Information

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	780	492-0809			780	433-4293	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	780	492-0806					
Primary E-mail sally.rice@ualberta.ca							
Secondary E-mail							

Checked

Web CV

2011/10/06

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

PROTECTED B WHEN COMPLETED



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Family name, Given name

RICE, Sally

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address			Address		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Country			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number Country code    Area code    Number    Extension			
Temporary E-mail					

Family name, Given name

RICE, Sally

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	342	Post-Secondary Education and Research
2	240	Indigenous peoples
3	310	Northern development

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p><b>Year</b></p> <p>_____ BC AD</p> <p>_____ <input type="radio"/> <input type="radio"/></p> <p>_____ <input type="radio"/> <input type="radio"/></p>	<p><b>Year</b></p> <p>_____ BC AD</p> <p>_____ <input type="radio"/> <input type="radio"/></p> <p>_____ <input type="radio"/> <input type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1140	Northern Canada
2	1130	Western Canada
3	1000	North America

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1	1100	CANADA	AB
2	1100	CANADA	NT
3	1200	UNITED STATES	NM
4	1200	UNITED STATES	AZ
5	1200	UNITED STATES	AK

Family name, Given name

RICE, Sally

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Dene Suline, Tsuut'ina, Dogrib, S.
French	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Slavey, Navajo, Cree, German, Spanish

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position		Start date (yyyy/mm)
Full Professor		2004
Org. code	Full organization name	
1480111	University of Alberta	
Department/Division name		
Linguistics		
Position type	Employment status	
<input checked="" type="radio"/> Tenured <input type="radio"/> Tenure-track	<input type="radio"/> Non-tenure <input type="radio"/> Non-academic	<input checked="" type="radio"/> Full-time <input type="radio"/> Part-time <input type="radio"/> Non-salaried <input type="radio"/> Leave of absence
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Associate Professor	1995	2004
Org. code	Full organization name	
1480111	University of Alberta	
Department/Division name		
Linguistics		
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Assistant Professor	1990	1995
Org. code	Full organization name	
1480111	University of Alberta	
Department/division name		
Linguistics		
Position	Start date (yyyy/mm)	End date (yyyy/mm)
Lecturer	1989	1990
Org. code	Full organization name	
1480111	University of Alberta	
Department/Division name		
Linguistics		

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Family name, Given name

RICE, Sally

## Work Experience (cont'd)

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Instructor		1988	1989
Org. code	Full organization name		
1	Smith Clinic for Academic/Motor Therapy		
Department/Division name			
Assessment and Tutoring			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code		Full organization name	
Department/Division name			

RICE, Sally

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1984/09		1987/12
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
62400	Linguistics	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9983105	University of California, San Diego			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1981/09		1984/06
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
62400	Linguistics	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9983105	University of California, San Diego			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.		1974/09		1978/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
52200	Literature, French	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9974102	Colorado College			
Country	UNITED STATES			
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

RICE, Sally

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	McCalla Research Professorship, U of A	CANADA	12	\$0 2008
Academic Prize	Landrex Distinguished Professorship, Arts, U of A	CANADA	60	\$250,000 2007
Professional Designation	President, CSDLA (North America)	UNITED STATES		2005
Professional Designation	Governing Board, ICLC (International)	CANADA		2001
Graduate Scholarship	University of California Dissertation Scholarship	UNITED STATES		1987
Fellowship	University of California Regents Fellowship	UNITED STATES		1981

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

lexical semantics; field linguistics; Athapaskan languages: indigenous language education; cognitive linguistics; corpus linguistics

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	62430	Semantics	
2	62404	Comparative Linguistics	
3	62422	Morphology	
4	62406	Computers and Language	
5	62499	Other Linguistics	Language Documentation/Revitalization

Family name, Given name

RICE, Sally

**Funded Research**

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
3010325	Social Sciences and Humanities Research Council of Canada	2010	\$52,000
Role	Collaborator	Completion status <input checked="" type="checkbox"/> Complete	
Project title	Apachean Origins: Exploring the Canadian Heritage of A.D. 13th Century Dene at Promontory Point, Utah		
Applicant's family name	Applicant's given name	Initials	
Ives	John	W	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	National Science Foundation (USA)	2009	\$217,572
Role	Co-applicant	Completion status <input type="checkbox"/> Complete	
Project title	An Interactive Speech Atlas of Dene-Speaking Communities in the Mackenzie Basin		
Applicant's family name	Applicant's given name	Initials	
McDonough	Joyce	M	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
3010325	Social Sciences and Humanities Research Council of Canada	2009	\$105,194
Role	Collaborator	Completion status <input type="checkbox"/> Complete	
Project title	Bare Nouns in Dene Suline Texts		
Applicant's family name	Applicant's given name	Initials	
Wilhelm	Andrea		
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	Canadian Heritage	2007	\$474,600
Role	Applicant	Completion status <input checked="" type="checkbox"/> Complete	
Project title	Community Linguist Certificate (CILLDI)		
Applicant's family name	Applicant's given name	Initials	

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Family name, Given name

RICE, Sally

## Funded Research (cont'd)

Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2007	Total amount (CAN\$) \$90,824
Role Co-applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title ICE Canada and English Collostructions			
Applicant's family name Newman		Applicant's given name John	
Initials			
Org. code 1	Full name of funding organization University of Alberta Faculty of Arts	Year awarded (yyyy) 2007	Total amount (CAN\$) \$250,000
Role Applicant		Completion status <input type="checkbox"/> Complete	
Project title Research portion of Landrex Distinguished Professorship, Faculty of Arts			
Applicant's family name		Applicant's given name	
Initials			
Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2003	Total amount (CAN\$) \$393,007
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title The Daghida Project: Language Research and Revitalization in a First Nations Community [CURA Completion Grant]			
Applicant's family name		Applicant's given name	
Initials			
Org. code 3010325	Full name of funding organization Social Sciences and Humanities Research Council of Canada	Year awarded (yyyy) 2000	Total amount (CAN\$) \$572,836
Role Applicant		Completion status <input checked="" type="checkbox"/> Complete	
Project title The Daghida Project: Language Research and Revitalization in a First Nations Community [CURA]			
Applicant's family name		Applicant's given name	
Initials			

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# 1. Research Contributions over the Last Six Years (\* = SSHRC-funded research)

## A. Refereed Contributions

- Newman, J., H. Baayen, **S. Rice** (eds.). In press. *Corpus-Based Studies in Language Use, Language Learning, and Language Documentation*. Amsterdam: Rodopi. [30%]
- \* **Rice, S.** In press. "Our language is very literal: Figurative expression in Dene Sų́líné [Athapaskan]. In A. Idstrom, E. Piirainen, & K. Wilson (eds.), *Endangered Metaphors*. Amsterdam/Philadelphia: John Benjamins.
- Rice, S.** 2011. Applied field linguistics: Delivering linguistic training to speakers of endangered languages. *Language and Education* 25: 319-338.
- Rice, S.** & J. Newman (eds.). 2010. *Experimental and Empirical Methods in the Study of Conceptual Structure, Discourse, and Language*. CSLI/U of Chicago Press. [50%]
- Rice, S.** & J. Newman. 2010. Converging methodologies. In S. Rice & J. Newman (eds.), *Experimental and Empirical Methods in the Study of Conceptual Structure, Discourse, and Language*, xv-xxx. Stanford: CSLI/U of Chicago Press. [90%]
- Ives, J. W., **S. Rice**, & E. Vajda. 2010. Dene-Yeniseian and processes of deep change in kin terminologies. *Anthropological Papers of the University of Alaska (APUA)*, Vol. 6 (1-2): 223-256. Fairbanks: UAF Press. [15%]
- \* **Rice, S.** 2009. Athapaskan eating and drinking verbs and constructions. In J. Newman (ed.), *The Linguistics of Eating and Drinking*, 109-152. Amsterdam/Philadelphia: John Benjamins.
- Newman, J. & **S. Rice**. 2008. Asymmetry in English multi-verb sequences: A corpus-based approach. In B. Lewandowska-Tomaszczyk (ed.), *Asymmetric Events*, 3-23. Amsterdam/Philadelphia: John Benjamins. [50%]
- Rice, S.** & K. Kabata. 2007. Crosslinguistic grammaticalization patterns of the ALLATIVE. *Linguistic Typology* 11: 453-516. [75%]
- Cuyckens, H., D. Sandra, & **S. Rice**. 2006. Towards an empirical lexical semantics. In V. Evans, B. Bergen, & J. Zinken (eds.), *The Cognitive Linguistics Reader*. London: Equinox. [30%]
- Newman, J. & **S. Rice**. 2006. Transitivity schemas of English EAT and DRINK in the BNC. In S. Th. Gries & A. Stefanowitsch (eds.), *Corpora in Cognitive Linguistics: Corpus-based Approaches to Syntax and Lexis*, 225-260. Amsterdam/Philadelphia: John Benjamins. [50%]

## B. Other Refereed Contributions (Refereed Conference Presentations)

- Rice, S.** 2011. Corporal incorporation and extension in Dene Sų́líné (Athapaskan) lexicalization. *The Body in Language: Lexicon, Metaphor, Grammar and Culture*. 21-22 October 2011. University of Warsaw; Poland.
- Thompson, C., C. Cox, & **S. Rice**. 2011. The grammaticalization of Dene demonstratives: Taking a second look at some "grey wolf particles" in Dene texts. *2011 Dene Languages Conference*. 27-28 June 2011. Whitehorse, YK; Canada. [75%]
- Rice, S.** & C. Cox. 2011. Participant referencing and event structuring through semi-cognate deixis markers in several Northern Dene (Athapaskan) languages. *AFLiCo IV*. 24-27 May 2011. University of Lyon; France. [75%]
- Abdulrahim, D., J. Newman, & **S. Rice**. 2011. Multifactorial methods for exploring

- contextual factors in the usage of Modern Standard Arabic COME verbs. *Workshop on Arabic Corpus Linguistics*. 11-12 April 2011. Lancaster University; UK. [20%]
- Abdulrahim, D., J. Newman, & S. Rice. 2011. COME verbs in Modern Standard Arabic: A corpus-based constructionist account of *ʔata*, *ʔaʕa*, *qadima* and *hadara*. 25<sup>th</sup> *Arabic Linguistics Symposium*. 4-6 March 2011. University of Arizona; USA. [30%]
- Rice, S. & J. Wilmot. 2011. Delivering linguistic training to speakers of endangered languages: CILLDI and the Community Linguist Certificate Program. 2<sup>nd</sup> *International Conference on Language Documentation and Conservation*. 11-13 February 2011. University of Hawai'i at Mānoa; USA. [80%]
- Abdulrahim, D. & S. Rice. 2010. Orthographically motivated spatial biases in the conceptual representation of events: Evidence from Arabic and English. Poster presentation at the *Linguistic Evidence 2010 Conference*. 11-13 February 2010. University of Tübingen; Germany. [50%]
- Snoek, C. & S. Rice. 2010. Event metonymies in Northern Athapaskan. Platform presentation at the 2010 *Dene Languages Conference*. 26 June 2010. University of Oregon; USA. [50%]
- D. Abdulrahim & S. Rice. 2009. Evidence for cross-linguistic spatial biases in the conceptual representation of events. *Canadian Linguistics Association (ACL/CLA)*. 23-25 May 2009. University of Ottawa; Canada. [50%]
- C. Snoek & S. Rice. 2009. Lexicalization patterns in body part and effluvia terms in Athapaskan. *Workshop on American Indigenous Languages (WAIL)*. 8-9 May 2009. University of California, Santa Barbara; USA. [50%]
- J. McDonough, J. Lachler, & S. Rice. 2009. An interactive speech atlas of the Dene languages of the Mackenzie Basin. *Conference on Endangered Languages and Cultures of Native America (CELCNA)*. 27-29 March 2009. U of Utah; USA. [30%]
- S. Rice, B. Tucker, C. Cox, & B. Starlight. 2009. Linguistic training in an endangered language community: The University of Alberta's Community Linguist Certificate program and the Tsuu T'ina Nation. *Conference on Endangered Languages and Cultures of Native America (CELCNA)*. 27-29 March 2009. U of Utah; USA. [50%]
- J. McDonough, J. Lachler, & S. Rice. 2009. Aspiration as phonation: an acoustic analysis of aspirated affricates in the Dene languages. *SSILA Annual Meeting*. January 9-11. San Francisco, CA; USA. [20%]
- \* Miwa, K., G. Libben, R. H. Baayen, & S. Rice. 2008. Lexical activation in picture comparison: A cross-linguistic approach to the relation between language and thought in the mental lexicon. 6<sup>th</sup> *International Conference of Cognitive Science*. 27-29 July 2008. Yonsei University; Korea. [20%]
- Rice, S. 2008. Received and not-so-received wisdom about Athapaskan linguistics for archaeologists. *Society for American Archaeology 73<sup>rd</sup> Annual Meeting*. 26-30 March 2008. Vancouver, BC; Canada.
- Rice, S. & J. Newman. 2008. Beyond the lemma: Inflection-specific constructions in English. *American Association of Corpus Linguistics*. 13-15 March 2008. Brigham Young University; USA. [50%]
- Rice, S. & S. Borgwaldt. 2007. A cross-linguistic experimental study of the spatial semantics of verbs: How writing system directionality and metaphor impinge on event structure. 10<sup>th</sup> *International Cognitive Linguistics Conference*. 15-20 July 2007. Jagiellonian University; Poland. [50%]

- Rice, S. & S. Borgwaldt.** 2006. Where do spatial associations for non-spatial verbs come from and how language-specific are they? *8<sup>th</sup> Conceptual Structure, Discourse, and Language Conference*. 3-5 November 2006. UC, San Diego; USA. [50%]
- Newman, J. & **S. Rice**. 2006. English adjectival inflection: A radical Radical Construction Grammar approach. *8<sup>th</sup> Conceptual Structure, Discourse, and Language Conference*. 3-5 November 2006. UC, San Diego; USA. [50%]
- Ives, J.W. & **S. Rice**. 2006. Correspondences in archaeological, genetic, and linguistic evidence for Apachean history. Poster presentation at the *Languages and Genes Conference*. 8-10 September 2006. UC, Santa Barbara; USA. [30%]
- Borgwaldt, S. & **S. Rice**. 2006. *Push* goes right & *admire* goes up: Where spatial associations for English verbs come from. *Cognitio*. 19 Aug 2006. UQAM; Canada. [50%]
- \* Thiering, M. & **S. Rice**. 2006. Language on the land: Video-based elicitation materials for Dene languages. *Dene Languages Conference*. 15-16 June 2006. Yellowknife, NWT; Canada. [50%]

### C. Non-refereed Contributions (Invited Plenary Addresses or Workshop Presentations)

- Rice, S.** 2011. Challenges to studying the “social-interaction” engine” in endangered language communities: Notes from the Canadian field. *Interactional Foundations of Language Workshop*; Steve Levinson and Nick Enfield, organizers. 2011 LSA Institute. 16-17 July 2011. CU Boulder; USA.
- Rice, S.** 2010. Turning evidence: Field linguistics in the 21<sup>st</sup> century. Keynote address at the 2010 *Workshop in American Indian Linguistics* (WAIL). 30 April-1 May 2010. UC, Santa Barbara; USA.
- Rice, S.** 2010. Mother tongues and Mother Earth: How the extinction of small languages threatens our planet. 2009-2010 Dimic Institute for Comparative and Cross-Cultural Studies Lecture Series, *Green Thoughts in Green Shades*. 17 March 2010. U Alberta.
- \* **Rice, S.** 2006. Radical Construction Grammar meets the Dene verb. Keynote address at the *High Desert Linguistics Society Conference (HDLS-7)*. 9-11 November 2006. University of New Mexico; USA.

### D. Works Under Review or in Progress

- \* **Rice, S.** Dene verb stem polysemies.
- Rice, S.** 2011. Review of Mandeville, Francois. 2009. *This is What They Say, A Story Cycle dictated in Northern Alberta in 1928*, edited & translated from Chipewyan by Ron Scollon. Seattle: University of Washington Press. Paperback, 286 pp. *IJAL*
- Rice, S. & J. Newman.** Inflectional islands.
- \* **Rice, S. & V. Wood.** *Dene Yatié*. [pedagogical grammar]
- \* **Rice, S. (ed.).** *Dene-English Bilingual Dictionary* [community-based dictionary].

### 2. Other Research Contributions

#### Conference/Workshop Organization

- 2009 *American Association of Corpus Linguistics (AACL)*, University of Alberta, 8-11 October 2009 [with J. Newman & H. Baayen]
- 2009 *We All Have Holes in Our Stories: Dene Migration Workshop* at the Tsuu T’ina Nation and University of Alberta Calgary Centre, 25-27 Sept 2009 [with B. Starlight & J. Ives]
- 2008 *Dene Languages Conference*, Cold Lake First Nation, 3-5 July 2008 [with V. Wood]

Major Teaching and Governance Responsibilities

Interim Director, 2010, *The Canadian Indigenous Languages & Literacy Development Institute*

Co-director, 2001-2009, *The Canadian Indigenous Languages & Literacy Development Institute*

Through my teaching and mentorship in this annual summer school, I have taught over 100 speakers of some 20 aboriginal languages of Canada in introductory and advanced linguistics courses. In 2007, with funding from Canadian Heritage, I developed the Community Linguist Certificate, a 6-course accredited program that trains speakers of Aboriginal languages in the basics of linguistic analysis, language documentation technologies, and language policy and planning so they can be effective in language revitalization efforts in their home communities.

**3. Most Significant Research Contributions**

1. Sandra, D. & **S. Rice**. 1995. Network analyses of prepositional meaning: Mirroring whose mind—the linguist's or the language user's? *Cognitive Linguistics* 6:89-130. [50%]
2. **Rice, S.** 1987. Towards a cognitive model of transitivity. UCSD doctoral dissertation.
3. **Rice, S.** 1988. Unlikely lexical entries. *Proceedings of the 14<sup>th</sup> Annual Meeting of the Berkeley Linguistics Society*, 202-212.
4. **Rice, S.** 1996. Prepositional prototypes. In R. Dirven & M. Pütz (eds.), *The Construal of Space in Language and Thought*, 135-165. Berlin/New York: Mouton de Gruyter.
5. **Rice, S.** & K. Kabata. 2007. Crosslinguistic grammaticalization patterns of the ALLATIVE. *Linguistic Typology* 11: 453-516. [75%]

**4. Career Interruptions and Special Circumstances**      None**5. Contributions to Training over the Last Six Years****PhD**

Phillips, A., in progress (topic: Northern Pwo Karen morphosyntax)

Inglis, D., in progress (topic: Tai Khamti morphosyntax) [co-supervisor with J. Newman]

Dowbor, D., in progress (topic: English corpus linguistics) [co-supervisor with J. Newman]

Snoek, C., in progress (topic: Athapaskan lexicalization patterns in body part terminology)

Abdulrahim, D., in progress (topic: Corpus-based analysis of the semantics of basic motion verbs in Modern Standard Arabic) [co-supervisor with J. Newman]

Yin, H., 2010. *Serial verb constructions in Mandarin Chinese* [U of A Killam Award winner [co-supervisor with J. Newman]

- \* Thiering, M., 2007. *The construction of topological space* [currently Research Fellow, MPI for the History of Science, Berlin]

**MSc**

Thunder, D., in progress (topic: Cree morphosyntax)

Braun, E., in progress (topic: Japanese comparative constructions)

- \* Holden, J., 2006, *Higher order predicates in Dene Suliné*
- Ivanova, A., 2006, *Impersonal constructions in Russian*

**BA, Honors**

Cassidy Foxcroft, in progress (topic: The effects of polity and language policy on Inuit language health)

- \* Koji Miwa, 2006, *Morphology & picture relatedness: A cross-linguistic experimental study* [co-supervisor G. Libben]

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Internal use	CID (if known)
445412	204834

**Identification**

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

**Name**

Family name	Given name	Initials	Title
Shapiro	Beth		Dr.

**Citizenship** - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input checked="" type="radio"/> Other (country)	Have you applied for permanent residency?
			UNITED STATES	<input type="radio"/> Yes <input checked="" type="radio"/> No

**Statistical and Administrative Information**

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1976	<input checked="" type="radio"/> F <input type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input type="radio"/> Yes <input checked="" type="radio"/> No

Full name used during previous contact, if different from above

**Contact Information**

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
1	814	8639178					
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail beth.shapiro@gmail.com							
Secondary E-mail							

Checked

Web CV

2011/09/29

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

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Family name, Given name

Shapiro, Beth

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address 326 Mueller Lab			Address 326 Mueller Lab		
City/Municipality University Park			City/Municipality University Park		
Prov. / State PA		Postal/Zip code 16802	Prov. / State PA		Postal/Zip code 16802
Country UNITED STATES			Country UNITED STATES		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality			City/Municipality		
Prov./ State		Postal/Zip code	Prov./ State		Postal/Zip code
Country			Country		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)		Temporary telephone/fax number Country code    Area code    Number    Extension		
Temporary E-mail					

Family name, Given name

Shapiro, Beth

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	104	Biotechnology
2	180	Environment and Sustainability
3		

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From				To			
Year		BC	AD	Year		BC	AD
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>
_____		<input type="radio"/>	<input type="radio"/>	_____		<input type="radio"/>	<input type="radio"/>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1		
2		
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1			
2			
3			
4			
5			

Family name, Given name

Shapiro, Beth

**Curriculum Vitae****Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Spanish
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Assistant Professor				2007/9
Org. code	Full organization name			
9933103	Pennsylvania State University			
Department/Division name				
Biology				
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time <input type="radio"/> Part-time
	<input checked="" type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Non-salaried <input type="radio"/> Leave of absence
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Director, Ancient Biomolecules Centre			2003/10	2007/10
Org. code	Full organization name			
9121131	University of Oxford			
Department/Division name				
Department of Zoology				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/division name				
Position			Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name			
Department/Division name				



Shapiro, Beth

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		1999/10		2003/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80600	Biological Sciences	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9121131	University of Oxford			
Country <b>UNITED KINGDOM</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		1997/08		1999/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80600	Biological Sciences	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9958101	University of Georgia			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Hon.		1994/08		1999/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
80600	Biological Sciences	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
9958101	University of Georgia			
Country <b>UNITED STATES</b>				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

Shapiro, Beth

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Academic Prize	MacArthur Fellow	UNITED STATES		2009
Academic Prize	Searle Scholar	UNITED STATES		\$0 2009
Fellowship	Fellow, Newton Math Inst, Cambridge	UNITED KINGDOM		\$0 2007
Fellowship	Royal Society Univeristy Research Fellow	UNITED KINGDOM		\$0 2006
Fellowship	Wellcome Trust Fellowship	UNITED KINGDOM		\$0 2004

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

ancient DNA, molecular evolution, phylogenetics, population genetics

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	80600	Biological Sciences	
2	60424	Paleoanthropology, Ethnoarchaeology, Paleoethnology	
3	80500	Earth Sciences	
4			
5			

Family name, Given name

Shapiro, Beth

## Funded Research

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	National Science Foundation	2009	\$285,000
Role	Applicant		Completion status <input type="checkbox"/> Complete
Project title	Collaborative Research: Understanding the role of environmental change on the long-term population dynamics of one surviving and two extinct arctic mammals		
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
1	NASA Astrobiology Institute	2008	\$6,500,000
Role	Co-applicant		Completion status <input type="checkbox"/> Complete
Project title	PSARCI: Signatures of life from Earth and beyond		
Applicant's family name		Applicant's given name	Initials
House		Christopher	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role			Completion status <input type="checkbox"/> Complete
Project title			
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role			Completion status <input type="checkbox"/> Complete
Project title			
Applicant's family name		Applicant's given name	Initials

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

## 1. Research Contributions over the Last Six Years (selected)

### A. Refereed Contributions

- Edwards CJE, Suchard MA, Lemey P, Welch JJ, Barnes I, Fulton TL, 11 additional authors, Shapiro B. Ancient hybridization and a recent Irish origin for the modern polar bear matriline. *Current Biology* 21: 1-8 (2011).
- Lippold S, Knapp M, Kuznetsova T, Leonard JA, Benecke N, Ludwig A, Rasmussen M, Weinstock J, Willerslev E, Shapiro B, Hofreiter M. Discovery of lost diversity of paternal horse lineages using ancient DNA. *Nature Comm.* 2:450 (2011).
- Workman C, Dalen L, Vartanyan S, Shapiro B, Kosintev P, Sher A, Gotherstrom A, Barnes I. Population-level genotyping of coat colour polymorphism in woolly mammoth (*Mammuthus primigenius*). *Quat. Sci. Rev.* 30: 2304-2308 (2011).
- Ho SYW, Lanfear R, Phillips MJ, Barnes I, Thomas JA, Kolokotronis S-O, Shapiro B. Bayesian estimation of substitution rates from ancient DNA sequences with low information content. *Syst. Biol.* 60: 366-375 (2011).
- Ho SYW, Shapiro B. Skyline-plot methods for estimating demographic history from nucleotide sequences *Mol. Ecol. Res.* 11: 423-434 (2011).
- Harrison GL, Lemey P, Hurles M, Moyes C, Horn S, Pryor J, Malani J, Supuri M, Masta A, Teriboriki B, Toatu T, Penny D, Rambaut A, Shapiro B. Genomic analysis of Hepatitis B Virus reveals antigen state and genotype as source of evolutionary rate variation. *Viruses* 3: 83-101 (2011).
- Shapiro B, Ho SYW, Drummond AJ, Suchard MA, Pybus O, Rambaut A. A Bayesian phylogenetic method to estimate unknown sequence ages. *Mol. Biol. Evol.* 28: 879-887 (2011).
- Firth C, Kitchen A, Shapiro B, Suchard MA, Holmes EC, Rambaut A. Using time-structured data to estimate evolutionary rates of double-stranded DNA viruses. *Mol. Biol. Evol.* 27: 2038-2051 (2010).
- Shapiro B, Hofreiter M. The analysis of ancient human genomes: using next generation sequencing, 20-fold coverage of the genome of a 4,000-year-old human from Greenland has been obtained. *Bioessays* 32: 388-391 (2010).
- Stack JC, Welch D, Ferrari MJ, Shapiro B, Grenfell BT. Protocols for sampling viral sequences to study epidemic dynamics. *J. Roy. Soc. Interface* 7: 1119-1127 (2010).
- Campos P, Willerslev E, Sher A, Axelsson E, Tikhonov A, Aaris-Sørensen K, Greenwood A, Kahlke R-D, Kosintsev P, Krakhmalnaya T, Kuznetsova T, Lemey P, MacPhee RD, Norris CA, Shepherd K, Suchard MA, Zazula GD, Shapiro B\*, Gilbert MTP\*. Ancient DNA analysis excludes humans as the driving force behind late Pleistocene musk ox (*Ovibos moschatus*) population dynamics. *PNAS* 107: 5675-5680 (2010).
- Kuhn TS, McFarlane K, Groves P, Moers AO, Shapiro B. Modern and ancient DNA reveal recent partial replacement of caribou in the southwest Yukon. *Mol. Ecol.* 19: 1312-1318 (2010).
- Haile J, Larson G, Owens K, Dobney K, Shapiro B. Ancient DNA typing of Archaeological Pig Remains Corroborates Historical Records. *J. Arch. Sci.* 37:174-177 (2010).
- Edwards CJ, Magee DA, Park SD, McGettigan PA, Lohan AJ, Murphy A, Finlay EK, Shapiro B,

- Chamberlain AT, Richards MB, Bradley DG, Loftus BJ, Machugh DE. A complete mitochondrial genome sequence from a mesolithic wild aurochs (*Bos primigenius*). *PLoS One* 5:e9255 (2010).
- Magiorkinis G, Magiorkinis E, Paraskevis D, Ho SYW, Shapiro B, Pybus O, Allain JP, Hatzakis A. The global spread of Hepatitis C Virus 1a and 1b: a phylodynamic and phylogeographic analysis *PLoS Med.* 6:e1000198 (2009).
- Cordingly JE, Sundaresan SR, Larison BJ, Shapiro B, Rubenstein DI. Grevy's zebra conservation: overcoming threats of isolation, genetic hybridization and demographic instability. *Anim. Conserv.* 12 520-521 (2009).
- Bunce M, Worthy T, Phillips M, Holdaway R, Willerslev E, Haile J, Shapiro B, Scofield P, Drummond A, Kamp P, Cooper A. The evolutionary history of the extinct ratite moa and New Zealand Neogene paleogeography. *Proc. Natl. Acad. Sci. USA* 106: 20646-20651 (2009).
- Ramsden C, Charleston MA, Duffy S, Shapiro B, Holmes EC. Insights into the evolutionary history of an emerging livestock pathogen: Porcine Circovirus 2. *J. Virol.* 83: 12813-12821 (2009).
- Zazula GD, MacKay G, Andrews TD, Shapiro B, Letts B, Brock F. A Late Pleistocene steppe bison (*Bison priscus*) partial carcass from Tsiigehtchic, Northwest Territories, Canada. *Quat. Sci. Rev.* 28: 2734-2742 (2009).
- Collins MJ, Penkman KEH, Rohalnd N, Shapiro B, Dobberstein RC, Rotz-Timme A, Hofretier M. Is amino acid racemization a useful tool for screening for ancient DNA in bone? *Proc. Roy. Soc. B* 276: 2971-2977 (2009).
- Weinstock J. Shapiro B, Prieto A, Martin JC, Gonz  les BA, Gilbert MPT, Willerslev E. The Late Pleistocene distribution of vicu  as (*Vicugna vicugna*) and the "extinction" of the gracile llama (*Lama gracilis*): new molecular data. *Quat. Sci. Rev.* 28: 15-16 (2009).
- Barnett R, Shapiro B, Ho SYW, Barnes I, Burger J, Yamaguchi N, Higham T, Wheeler, HT, Rosendhal W, Sher AV, Baryshnikov G, Cooper A. Phylogeography of lions (*Panthera leo*) reveals three distinct taxa and a Late Pleistocene reduction in genetic diversity. *Mol. Ecol.* 18: 1668-1677 (2009).
- Rambaut A, Drummond AJ, Ho SYW Shapiro B. Accommodating the effect of ancient DNA damage on inferences of demographic histories. *Mol. Biol. Evol.* 26: 245-248 (2009).
- Wilson M, Shapiro B, Hills LV. Late Pleistocene northward-dispersing *Bison antiquus* from the Bighill Creek Formation, Gallelli Gravel Pit, Alberta, Canada, and the fate of *Bison occidentalis*. *Can. J. Earth Sci.* 45: 827-859 (2008).
- Shapiro B. Engineered polymerases amplify the potential of ancient DNA. *Trends Biotech.* 26: 285-287 (2008).
- Ho SYW, Larson G, Edwards CJ, Heupink TH, Lain KE, Holland PWH, Shapiro B. Correlating Bayesian date estimates with climatic events and domestication using a bovine case study. *Biol. Lett.* 274: 1377-1385 (2008).
- Ho SYW, Saarma U, Barnett R, Haile J, Shapiro B. The effect of inappropriate calibration in molecular ecological studies: three case studies *PLoS ONE* 3: e1615 (2008).
- Barnett R, Yamaguchi N, Shapiro B, Sabin R. Ancient DNA analysis indicates the first English

- lions originated from North Africa, *Contrib. Zool.* 77: 7-16 (2008).
- Kapoor A, Shapiro B, Shafer RW, Rhee S-Y, Delwart EL. Multiple independent origins of protease inhibitor resistance mutation in salvage therapy patients. *Retrovirology* 5: 7 (2008).
- Buckley M, Walker A, Ho SYW, Yang Y, Smith C, Ashton P, Oates JT, Cappellini E, Koonn H, Penkman K, Elsworth B, Ashford D, Solazzo C., Andrews P, Strahler J, Shapiro B, Ostrom P, Gandhi H, Miller W, Raney B, Zylber MI, Gilbert MTP, Prigodich RV, Ryan M, Rijdsdijk KF, Janoo A, Collins M. Comment on "Protein sequences from Mastodon and Tyrannosaurus rex revealed by mass spectrometry" *Science* 319: 33 (2008).
- Barnett R, Yamaguchi N, Shapiro B, Nijman V. Using ancient DNA techniques to identify the origin of an unprovenanced museum specimen, as illustrated by the identification of a 19th century lion from Amsterdam, *Contrib. Zool.* 76: 87-94 (2007).
- Ho SYW, Shapiro B, Phillips MJ, Cooper A, Drummond AJ. Evidence for time dependency of molecular rate estimates. *Sys. Biol.* 56: 515-522 (2007).
- Barnes I, Shapiro B, Kuznetsova T, Sher A, Guthrie D, Lister A, Thomas MG. Genetic structure and extinction of the woolly mammoth. *Curr. Biol.* 17: 1072-1075 (2007).
- Ho SYW, Heupink, TH, Rambaut, A, Shapiro B. Bayesian estimation of sequence damage in ancient DNA. *Mol. Biol. Evol.* 24:1416-1422 (2007).
- Edwards CJ, Bollongino R, Scheu A, Chamberlain A, Tresset A, Vigne J-D, Baird JF, Larson G, Ho SYW, Heupink TH, Shapiro B, Freeman AR, et al. Mitochondrial DNA analysis shows a Near Eastern Neolithic origin for domestic cattle and no indication of domestication of European aurochs. *Proc. Roy. Soc B.* 274: 1377-1385 (2007).
- Rector A, Lemey P, Tachezy R, Mostmans S, Ghim S, Van Doorslaer K, Roelke M, Bush M, Montali RJ, Joslin J, Burk R, Jenson A, Sundberg JP, Shapiro B, Van Ranst M. Ancient papillomavirus-host co-speciation in Felidae. *Genome Biol.* 8:R57 (2007).
- Haile J, Holdaway R, Oliver K, Bunce M, Gilbert MTP, Nielsen R, Munch K, Ho, SYW, Shapiro B, Willerslev E. Ancient DNA chronology within sediment deposits: is DNA leaching a factor? *Mol. Biol. Evol.* 24: 982-989 (2007).
- Lemey P, Kosakovsky-Pond SL, Drummond A, Pybus O, Shapiro B, Barroso H, Taveira N, Rambaut A. Synonymous substitution rates predict HIV disease progression as a result of underlying replication dynamics. *PLoS Comp. Biol* 3:e29 (2007).
- Shapiro B, Rambaut A, Gilbert MTP. No proof that typhoid caused the Plague of Athens. *Int. J Infect. Dis.* 10:334-335 (2006).
- Shapiro B, Rambaut A, Drummond AJ. Choosing appropriate substitution models for the phylogenetic analysis of protein-coding sequences *Mol. Biol. Evol.* 23: 7-9 (2006).
- Poinar HN, Schwartz C, Qi J, Shapiro B, MacPhee RD, Buiges B, Tikhonov A, Huson D, Tonsho L, Auch A, Rampp M, Miller W, Schuster SC. Metagenomics to paleo-genomics: large scale sequencing of mammoth DNA. *Science* 311: 392-394 (2006).

#### **D. Forthcoming Contributions**

- Shapiro B. Reconstructing the past: Ancient DNA. Princeton Guide to Evolution. Losos, J. Ed. Princeton University Press. (In press).

- Shapiro B, Hofreiter M (Eds). Ancient DNA. Methods in Molecular Biology. Humana Press. (in press).
- Lorenzen ED, Nogues-Bravo D, Orlando L, Weinstock J, Binladen J, Marske KA, 52 additional authors, Shapiro B, Rahbek C, Willerslev E. Individualistic species responses to climate and humans determine Late Quaternary megafaunal extinction and survival. *Nature* (in press).
- Higham T, Compton T, Stringer C, Jacobi R, Shapiro B, Trinkaus E, Chandler B, Gröning F, Collins C, Hillson S, O'Higgins P, Fagan M. The earliest evidence for anatomically modern humans in Europe. *Nature* (in press).
- Kistler L, Shapiro B. Ancient DNA confirms a local origin of domesticated chenopod in Eastern North America. *Journal of Archaeological Sciences* (in press).
- Letts B, Fulton TL, Stiller M, Andrews T, MacKay G, Popkp R, Shapiro B. Ancient DNA reveals genetic continuity in woodland caribou of the Central Mackenzie Mountains, Northwest Territories, Canada. *Arctic* (in press).
- Orlando L, Ginolhac A, Raghavan M, Vilstrup J, Rasmussen M, Magnussen K, Steinmann K, Kapranov P, Thompson JF, Shapiro B, Zazula G, Froese D, Hofreiter M, Al-Rasheid KAS, Mundy J, Gilbert MTP, Willerslev E. Single-molecule ancient DNA sequencing of a Pleistocene horse bone. *Genome Research* (in press).
- Fulton TL, Wagner SM, Fisher C, Shapiro B. Nuclear DNA from the extinct passenger pigeon (*Ectopistes migratorius*) confirms its phylogenetic placement within the Columbinae. *Annals of Anatomy* (in press).

## 2. Other Research Contributions

Associate Editor, Molecular Biology and Evolution  
Scientific Advisory Board, Museum of Beringia.

## 3. Most Significant Career Research Contributions

- Shapiro B, Drummond AJ, Rambaut A, Wilson MC, Matheus P, Sher AV, Pybus OG, et al. Rise and fall of the Beringian steppe bison. *Science* 306: 1561-1565 (2004).
- Drummond AJ, Pybus OG, Shapiro B, Rambaut A. Bayesian coalescent inference of past population dynamics from molecular sequences. *Mol. Biol. Evol.* 22:1185-1192 (2005).
- Barnes I, Matheus P, Shapiro B, Jensen D, Cooper A. Dynamics of mammal population extinctions in eastern Beringia during the last glaciation. *Science* 295: 2267-2270 (2002).
- Rambaut A, Drummond AJ, Ho SYW, Shapiro B. Accommodating the effect of ancient DNA damage on inferences of demographic histories. *Mol. Biol. Evol.* 26: 245-248 (2009).

## 5. Contributions to Training over the Last Six Years

### PhD.

Current PhD students: Stack, Conrad; Korzow-Richter, Kristine; Kuhn, Tyler; Kistler, Logan.  
Letts, Brandon. PhD, Pennsylvania State University. 2010.  
Haile, James. DPhil, Oxford University, 2007,  
Harrison, Gabrielle. DPhil, Oxford University, 2007,

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461394	147064

## Identification

Only the information in the Name section will be made available to selection committee members and external assessors. Citizenship and Statistical and Administrative Information will be used by SSHRC for administrative and statistical purposes only. Filling out the statistical and Administrative Information section is optional.

### Name

Family name	Given name	Initials	Title
Supernant	Kisha	M	Dr.

### Citizenship - Applicants and co-applicants must indicate their citizenship status by checking and answering the applicable questions.

Citizenship status	<input checked="" type="radio"/> Canadian	<input type="radio"/> Permanent resident since (yyyy/mm/dd)	<input type="radio"/> Other (country)	Have you applied for permanent residency?
				<input type="radio"/> Yes <input type="radio"/> No

### Statistical and Administrative Information

Birth year	Gender	Permanent postal code in Canada (i.e. K2P1G4)	Correspondence language	Previous contact with SSHRC? (i.e. applicant, assessor, etc.)
1980	<input checked="" type="radio"/> F <input type="radio"/> M		<input checked="" type="radio"/> English <input type="radio"/> French	<input checked="" type="radio"/> Yes <input type="radio"/> No

Full name used during previous contact, if different from above

## Contact Information

The following information will help us to contact you more rapidly. Secondary information will not be released by SSHRC without your express consent.

Primary telephone number				Secondary telephone number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
	780	695-9915			780	492-7345	
Primary fax number				Secondary fax number			
Country code	Area code	Number	Extension	Country code	Area code	Number	Extension
Primary E-mail kisha.supernant@ualberta.ca							
Secondary E-mail kisha.supernant@gmail.com							

**Checked**

Web CV

2011/10/01

Personal information will be stored in the Personal Information Bank for the appropriate program.

Identification

**PROTECTED B WHEN COMPLETED**



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Family name, Given name

Supernant, Kisha

<b>Current Address</b> Use only if you are not affiliated with a department at a Canadian university. (If you are affiliated with a department at a Canadian university, the department's mailing address will be used.) If you wish to use another address, specify it under the Correspondence Address.			<b>Correspondence Address</b> Complete this section if you wish your correspondence to be sent to an address other than your current address.		
Address			Address		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Country			Country		
<b>Temporary Address</b> If providing a temporary address, phone number and/or E-mail, ensure that you enter the effective dates.			<b>Permanent Address in CANADA</b>		
Address			Address		
City/Municipality	Prov. / State	Postal/Zip code	City/Municipality	Prov. / State	Postal/Zip code
Country			Country CANADA		
Start date (yyyy/mm/dd)	End date (yyyy/mm/dd)	Temporary telephone/fax number Country code    Area code    Number    Extension			
Temporary E-mail					

Family name, Given name

Supernant, Kisha

## Research Expertise (optional)

The information provided in this section refers to your own research expertise, not to a research proposal. Filling out the following 4 sections is optional. This page will not be seen by selection committee members and external assessors. This section will be used for planning and evaluating programs, producing statistics, and selecting external assessors and committee members.

### Areas of Research

Indicate and rank up to 3 areas of research that best correspond to your research interests as well as areas where your research interests would apply. Duplicate entries are not permitted.

Rank	Code	Area
1	240	Indigenous peoples
2	190	Ethics
3	320	Politics and government

### Temporal Periods

If applicable, indicate up to 2 historical periods covered by your research interests.

From	To
<p>Year</p> <p>10000 BC AD</p> <p><input checked="" type="radio"/> <input type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>	<p>Year</p> <p>1800 BC AD</p> <p><input type="radio"/> <input checked="" type="radio"/></p> <p><input type="radio"/> <input type="radio"/></p>

### Geographical Regions

If applicable, indicate and rank up to 3 geographical regions covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Region
1	1130	Western Canada
2	1000	North America
3		

### Countries

If applicable, indicate and rank up to 5 countries covered by your research interests. Duplicate entries are not permitted.

Rank	Code	Countries	Prov./State
1	1100	CANADA	
2	1200	UNITED STATES	
3			
4			
5			

Family name, Given name

**Curriculum Vitae**

Supernant, Kisha

**Language Proficiency**

	Read	Write	Speak	Comprehend aurally	Other languages
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
French	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Work Experience**

List the positions, academic and non-academic, you have held beginning with the current position and all previous positions in reverse chronological order, based on the start year.

Current position				Start date (yyyy/mm)
Assistant Professor				2010/7
Org. code	Full organization name			
1480111	University of Alberta			
Department/Division name				
Anthropology				
Position type	<input type="radio"/> Tenured	<input type="radio"/> Non-tenure	Employment status	<input checked="" type="radio"/> Full-time <input type="radio"/> Part-time
	<input checked="" type="radio"/> Tenure-track	<input type="radio"/> Non-academic		<input type="radio"/> Non-salaried <input type="radio"/> Leave of absence
Position	Start date (yyyy/mm)	End date (yyyy/mm)		
Research Assistant	2010/1	2010/7		
Org. code	Full organization name			
1590111	The University of British Columbia			
Department/Division name				
Anthropology and Sociology				
Position	Start date (yyyy/mm)	End date (yyyy/mm)		
Researcher	2008/8	2010/4		
Org. code	Full organization name			
1	Indian and Northern Affairs Canada			
Department/division name				
Indian Residential School Commission				
Position	Start date (yyyy/mm)	End date (yyyy/mm)		
Instructor	2006/9	2009/5		
Org. code	Full organization name			
1590111	The University of British Columbia			
Department/Division name				
Anthropology and Sociology				

Family name, Given name

Supernant, Kisha

## Work Experience (cont'd)

Position		Start date (yyyy/mm)	End date (yyyy/mm)
Teaching Assistant		2005/9	2006/7
Org. code	Full organization name		
1590111	The University of British Columbia		
Department/Division name			
Anthropology and Sociology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Teaching Assistant		2004/9	2005/4
Org. code	Full organization name		
1590111	The University of British Columbia		
Department/Division name			
Anthropology and Sociology			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			
Position		Start date (yyyy/mm)	End date (yyyy/mm)
Org. code	Full organization name		
Department/Division name			

**Academic Background**

List up to 5 degrees, beginning with the highest degree first and all others in reverse chronological order, based on the start date.

Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Doctorate		2004/09		2011/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input checked="" type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
1590111	The University of British Columbia			
Country CANADA				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Master's		2003/09		2004/11
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1350911	University of Toronto			
Country CANADA				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
BA Gen.		1998/09		2002/05
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
60200	Anthropology	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Org. code	Organization			
1590111	The University of British Columbia			
Country CANADA				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				
Degree type	Degree name	Start date (yyyy/mm)	Expected date (yyyy/mm)	Awarded date (yyyy/mm)
Disc. code	Discipline	Did SSHRC support enable you to get this degree?		
		<input type="radio"/> Yes <input type="radio"/> No		
Org. code	Organization			
Country				

Family name, Given name

Supernant, Kisha

## Credentials

List up to 6 licences, professional designations, awards and distinctions you have received and feel would be the most pertinent to the adjudication of your application. List them in reverse chronological order, based on the year awarded.

Category	Name	Source or Country	Duration (Months)	Value / Year awarded
Postdoctoral Fellowship	SSHRC Post-Doctoral Fellowship	Federal Government CANADA	24	\$76,000 2010
Fellowship	Charles and Alice Borden Fellowship in Archaeology	University CANADA	12	\$13,500 2009
Fellowship	SSHRC Doctoral Fellowship	Federal Government	12	\$20,000 2007
Fellowship	Cordulla and Gunter Doctoral Fellowship	University CANADA	36	\$54,000 2004
Fellowship	University of Toronto Graduate Fellowship	University CANADA	12	\$10,400 2003

## Research Expertise

The information provided in this section refers to your own research expertise, not to a research proposal.

### Keywords

List keywords that best describe your areas of research expertise. Separate keywords with a semicolon.

Northwest Coast Archaeology; Hunter-gatherers; Landscapes; Archaeology of Warfare; Identity; Agency; Practice Theory; Defensive Sites; Indigenous archaeology; GIS; mapping

### Disciplines

Indicate and rank up to 5 disciplines that best correspond to your research interests. Duplicate entries are not permitted.

Rank	Code	Discipline	If Other, specify
1	60414	Hunters and Gatherers	
2	60499	Other Archaeology	Indigenous Archaeology
3	60402	Archaeology - General: Theory and Method	
4	60218	Social Anthropology	
5	60420	Methods and Techniques	

Family name, Given name

Supernant, Kisha

## Funded Research

List up to 8 grants or contracts you have received from SSHRC or other sources. List them in reverse chronological order, based on the year awarded. If you are not the applicant (principal investigator), specify that persons' name.

Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
3010325	Social Sciences and Humanities Research Council of Canada	2011	\$200,150
Role	Co-applicant	Completion status <input type="checkbox"/> Complete	
Project title The Development of a Hunter-Fisher-Gatherer Polity: The archaeology and history of the Tsimshian village complex at Prince Rupert Harbour			
Applicant's family name		Applicant's given name	Initials
Martindale		Andrew	
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role		Completion status <input type="checkbox"/> Complete	
Project title			
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role		Completion status <input type="checkbox"/> Complete	
Project title			
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role		Completion status <input type="checkbox"/> Complete	
Project title			
Applicant's family name		Applicant's given name	Initials
Org. code	Full name of funding organization	Year awarded (yyyy)	Total amount (CAN\$)
Role		Completion status <input type="checkbox"/> Complete	
Project title			
Applicant's family name		Applicant's given name	Initials

Personal information will be stored in the Personal Information Bank for the appropriate program.

Web CV

**Contributions:**

**Refereed Publications:**

(R) \* Martindale, A. and K. Supernant

2009 Quantifying the Defensiveness of Defended Sites on the Northwest Coast of North America. *Journal of Anthropological Archaeology* 28(2):191-204.

(R) Supernant, K.

2008 Cultural Landscapes Conceptualized: A cross-disciplinary genealogical history. *PlatForum* 9:97-111.

2004 Technology, Labour and Rank on the Northwest Coast: A preliminary experiment in slate bead manufacture. *Vis a vis: Explorations in Anthropology*. 7:38-57.

**Non-refereed Publications:**

Supernant, K.

2008 Be of Good Mind. *Canadian Journal of Archaeology* 32(2):281-284.

2007 Coming to Shore. *The Midden* 39(2):21-22.

2005 Mapping and Testing Housepits in the Fraser Valley. *The Midden* 37(3):9-12.

**Other refereed Contributions:**

Supernant, K.

\*2011 *Inscribing Identities on the Landscape: A spatial exploration of archaeological rock features in the Lower Fraser River Canyon*. Unpublished PhD Dissertation, University of British Columbia.

2011 To Defend or not to Defend?: An Evaluation of the Defensibility of Rock Feature Sites in the Lower Fraser River Canyon, BC. Paper presented at the 76th Annual Society for American Archaeology Meetings, Sacramento, CA

2010 An exploration of the histor(ies) of the landscape(s) of the Lower Fraser River Canyon. Paper presented at the Canadian Archaeological Association Conference, Calgary, AB



- 2010 Contemporary community disputes and the production of archaeological knowledge: A case from British Columbia, Canada. Paper presented at the Society of American Archaeology Conference, St. Louis, MI.
- \*2009 Encountering the Majestic: An archaeologist's experience of the Lower Fraser River Canyon. Plenary Session invited paper – Place, Landscape and Experience: Embodying Field Research. BC Studies Conference, Victoria, B.C.
- \*2008 Conflict and Cooperation: An exploration of the dynamic landscapes of the Lower Fraser River Canyon, BC." Paper presented at the Northwest Anthropological Conference, Victoria, B.C.
- 2007 Warfare on the Northwest Coast: Towards a holistic (archaeological) approach. Paper presented at the University of British Columbia Anthropology Graduate Conference, Vancouver, B.C.
- 2006 Identity, Conflict and Landscape: The practice of identity formation in the Lower Fraser Canyon, Paper presented at the Canadian Archaeological Association Conference, Toronto, ON
- 2005 Landscapes of Conflict: Local perspectives on regional warfare. Paper presented at the Canadian Archaeological Association Conference, Nanaimo, B.C.

Supernant, Kisha and David Schaepe

- 2008 Defining Community through Defense? An exploration of rock fortifications and identity formation in the Lower Fraser River Canyon, B.C. Poster presented at the Society for American Archaeology Meetings, Vancouver, B.C.

Blake, Michael, Kisha Supernant, Sue Formosa and Bruce Benz.

- 2010 A web-based method for mapping: An example showing the spread of early maize in the Americas. Poster presented at the Society of American Archaeology Conference, St. Louis, MI.

**Forthcoming Publications:**

(R) \* Supernant, K.

- 2012 Rock Features of the Lower Fraser River Canyon. Archaeology of the Lower Fraser River Region. Ed. M. Rousseau and R. Carlson. Burnaby, BC: SFU Archaeology Press, 2012 (Abstract accepted, article under review)

**Other Research Contributions:**

Supernant, Kisha

- 2011 Session organizer and chair, "Theorizing the Salish Sea: New Perspectives on the Gulf of Georgia Region of the Northwest Coast." Symposium organized for the 76th Annual Society for American Archaeology Meeting Sacramento, CA
- 2011 Research Presentation to Shxw'ó'hamel First Nation. Shxw'ó'hamel First Nation Band Office.
- 2010 Research Presentation to Yale First Nation. Yale First Nation Band Office, Yale, BC
- 2008 Session organizer and chair, "Beyond the Household: Physical and Cultural Landscapes in the Archaeology of the Northwest Coast", Northwest Anthropological Conference, Victoria, B.C.
- 2008 Session Chair, University of British Columbia Anthropology Graduate Conference, Vancouver, B.C.
- 2006 Conference Chair, "Old kaleidoscopes, new visions?" Conference, Faculty of Arts/Department of Anthropology and Sociology, University of British Columbia.