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NFRFT-2020-00188

Notice of Intent - New Frontiers in Research Fund - Transformation 2020

Application ID: NFRFT-2020-00188 **Administering organization:** University of Alberta
Applicant: Parlee, Brenda **Funding opportunity:** New Frontiers in Research Fund
- Transformation
Title: Leading Change: Biodiversity Conservation and the Well-being of Indigenous Peoples

Application Details

Language of the application:

English

Does your proposal involve Indigenous research as defined by SSHRC?

Yes

List of Participants

Participant

Parlee, Brenda - Nominated Principal Investigator

Professor
University of Alberta, Resource Economics and
Environmental Sociology
Canada

Littlechild, Danika - Co-Principal Investigator

Assistant Professor
Carleton University, Law and Legal Studies
Canada

Silvano, Renato - Co-Applicant

Professor
Universidade Federal do Rio Grande do Sul , Ecology
Brazil

O'Neil, John - Co-Applicant

Professor
Simon Fraser University, Health Sciences
Canada

Mustonen, Tero - Co-Applicant

Independent Researcher
Snowchange Cooperative, Climate Change
Finland

Lantz, Trevor - Co-Applicant

Associate Professor
University of Victoria, Environmental Studies
Canada

Schmiegelow, Fiona - Co-Applicant

Director
University of Alberta, UAlberta North
Canada

Humphries, Murray - Co-Applicant

Associate Professor
McGill University, Natural Resource Sciences
Canada

Primary Affiliation

Professor
University of Alberta, Resource Economics and
Environmental Sociology
Canada

Assistant Professor
Carleton University, Law and Legal Studies
Canada

Professor
Universidade Federal do Rio Grande do Sul , Ecology
Brazil

Professor
Simon Fraser University, Health Sciences
Canada

Independent Researcher
Snowchange Cooperative, Climate Change
Finland

Associate Professor
University of Victoria, Environmental Studies
Canada

Director
University of Alberta, UAlberta North
Canada

Associate Professor
McGill University, Natural Resource Sciences
Canada

Collaborators

Name	Position	Organization and Department
Raygorodetsky, Gleb	Director	Government of Alberta, Canada Indigenous Knowledge, Community Monitoring, Citizen Science Branch
Reece, Cleo	Elder	Fort McMurray First Nation, Canada Lands and Environment
Roe, Dilys	Independent Researcher	International Institute for Environment and Development, Canada Livelihoods
Courtois, Val	Lead	Indigenous Leadership Initiative, Canada Guardians Program
Kuhnlein, Harriet	Professor Emeritus	McGill, Canada School of Human Nutrition
Lyver, Phil	Senior Researcher	Manaaki Whenua – Landcare Research', New Zealand Wildlife Ecology & Management
Andrew, Leon	Special Advisor	Sahtu Renewable Resources Board, Canada Sahtu Renewable Resources Board
Tsannie, Joseph	Vice Chief	Prince Albert Grand Council, Canada Hachet Lake First Nation

Fields of Research

Primary	Code	Group (Discipline)	Class	Field
	RDF1050801	Earth and related environmental sciences	Environmental management sciences	Indigenous peoples environmental knowledge
	RDF1050802	Earth and related environmental sciences	Environmental management sciences	Conservation
	RDF1050810	Earth and related environmental sciences	Environmental management sciences	Natural resource management
	RDF5040104	Sociology and related studies	Sociology	Rural sociology
	RDF5060212	Political science and policy administration	Policy and policy administration	Environment policy
	RDF3030106	Health sciences	Nutrition and dietetics	Food security
	RDF3030201	Health sciences	Public and population health	Indigenous health

Keywords

Biodiversity

Well-being

Conservation

Indigenous Knowledge

Livelihoods



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Project Description

Outline of challenge

Indigenous peoples, including hunters, fishers, herders, and others, are stewards of over 25% of the world's surface area; approximately 80% of Earth's biodiversity is located within those areas. As global biodiversity is threatened, echoing impacts are anticipated for the well-being of Indigenous peoples. Current approaches to biodiversity conservation are not sufficient to address the problem. Many tend to be colonial in origin, are based on narrow disciplinary perspectives and as a result have systemically marginalized Indigenous values and voices. Despite this history and associated socio-economic and political barriers, Indigenous communities in many regions of the globe are demonstrating significant leadership and spirit in their efforts to protect their heritage. This project answers the call of Indigenous leaders, Canada's Truth and Reconciliation Commission and recommendations of recent global assessments to rethink "conservation" and elevate these best/wise practices of Indigenous communities. Of particular concern are communities and ecosystems under stress where biodiversity has been lost, species are already at risk/endangered and where land-use conflicts and lack of government protections have created conditions of vulnerability. Through this Indigenous and community-led project which includes an interdisciplinary team of scholars and resource peoples, we will mobilize Indigenous knowledge and create tools for communities to track and inform local-global decisions about the importance of biodiversity to their well-being.

OBJECTIVES:

CAPACITY BUILDING: a) Build capacity within Indigenous and local communities to document, share and apply their own knowledge in ways that are culturally meaningful and socio-politically relevant to issues of biodiversity conservation within their territories; b) Nurture the development/rediscovery of Indigenous knowledge and management systems so as to ensure biodiversity conservation contributes to well-being.

EVIDENCE-BASED RESEARCH: c) Build from the significant body of work related to common pool resources, community-based resource management and Indigenous-led conservation, to carry out evidence-based research aimed at determining "design principles" (best/wise practices) that detail, where and how, biodiversity conservation and well-being of Indigenous communities are interconnected; d) Explore how biodiversity is a protective factor and/or determinant of well-being and cultural security and continuity for Indigenous peoples and local communities.

POLICY TRANSFORMATION: Local - e) Create tools and models of best/wise practices that can be used by other communities to assess, track and inform decision-making; f) contribute to inter-generational knowledge sharing and educational outcomes within communities to improve well-being and cultural continuity. Regional-Global - Transform the processes and institutions that are engaged in national-global biodiversity conservation (i.e., Conventional Biological Diversity) such that Indigenous knowledge and the voices of Indigenous and local peoples are foregrounded in decision-making. This will be achieved in the short term by; g) creating culturally appropriate indicators and models about the relationship between biodiversity-well-being, and h) creating principles and platforms (i.e., ethical space) that generate social and institutional learning within NGOs, governments and the public.

Overview of approach and potential changes

The scope of the project is novel in its combined concern with the well-being of Indigenous peoples and the conservation of biodiversity; it is also unique in its intention to build capacity within Indigenous communities to document and mobilize knowledge about biodiversity-well-being in ways that are recognized by regional-national-global institutions of biodiversity conservation. The research project was defined in collaboration with Indigenous organizations and partners in Canada and globally. We propose a place-based participatory approach that allows for capacity-building, evidence-based research, knowledge mobilization and action in key regions globally. Led by Indigenous scholars and an Indigenous Advisory Council, the research team will engage in collaborative community-based research within Canada and 5 other global hubs. Building from the successes of existing networks in Canada and elsewhere (e.g., Tracking Change), the project team will draw on expertise and tools from across the tri-councils to document and mobilize knowledge. The foundation of the research approach and anticipated outcome will be holistic and based on concepts from Indigenous knowledge that are inherently interdisciplinary). By year 6, we will have addressed the following outcomes:

WELL-BEING of INDIGENOUS COMMUNITIES: The well-being of Indigenous communities globally is recognized as an urgent concern by the United Nations and national governments, including Canada. Indigenous peoples, particularly youth, are over-represented in statistics on food insecurity, health service inequity and within the justice system. However, emphasis on Indigenous communities as vulnerable and “ill” can be used to perpetuate paternalistic policies/institutions and relations of dependency. Through the project, we particularly aim to elevate and nurture the voices of youth and communities with the hope of bolstering the work of Indigenous leaders in Canada and globally who are reframing colonial narratives about Indigenous peoples and building capacity within communities to care for themselves and their own lands and resources.

BIODIVERSITY CONSERVATION: The loss of biodiversity globally is a critical challenge for communities, who depend on the sustainability of ecosystems. It is predicted that numerous species are being lost annually with dire predictions for 2050. Curbing biodiversity losses and creating opportunities for biodiversity restoration, through this project is possible with the increased recognition of best/wise practices of Indigenous communities based on the diverse multi-generational knowledge systems that exist in Canada and globally.

GOVERNANCE: By mobilizing Indigenous knowledge and creating tools for communities to track and inform local-global decisions about the importance of biodiversity to their well-being, this project will address inequities in governance that exist in Canada and elsewhere. By doing so we address inequities in Indigenous engagement in natural resource governance locally -globally. We also serve all Canadians in responding to the calls to action of the Truth and Reconciliation Commission on Residential Schools and supporting Canada and other nations in efforts to respect and implement the principles of the United Nations Declaration on the Rights of Indigenous Peoples.

Suggested Reviewers

Name	Position	Organization and Department	Areas of Expertise
Agrawal, Arun	Professor	University of Michigan, United States School for Environment and Sustainability	community-based resource management, conservation, institutions, common property, local knowledge, Indigenous knowledge
Danielson, Finn	Professor	University of Copenhagen, Denmark Nordic Foundation for Development and Ecology	citizen science, local knowledge, community-based monitoring, conservation, biodiversity
Wenzel, George	Professor	McGill University, Canada Geography	Indigenous peoples, conservation, traditional knowledge, arctic

Reviewer Exclusions

Name	Organization and Department
Trosper, Ron	University of Arizona, United States American Indian Studies



Eligibility Profile for Brenda Parlee - Nominated Principal Investigator

Independent Research Appointment

As of 2021-01-01, will you be an independent researcher at your primary affiliation as defined by the New Frontiers in Research Fund - Transformation?

Yes

Affiliation

Primary Affiliation

University of Alberta - Professor

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

No

Eligibility Profile for Renato Silvano - Co-Applicant

Appointment

As of 2021-01-01, will you be an independent researcher, practitioner, policy-maker, educator, decision-maker, health-care administrator, Indigenous elders, Indigenous knowledge keeper, community leader, individual working for a charity or other similar eligible position?

Yes

Choose the appointment type associated with your selected affiliation

Independent researcher

Affiliation

As of 2021-01-01, will your eligible appointment be with a federal, provincial, territorial or municipal government department or a for-profit organization?

No

Choose the affiliation associated with your eligible appointment

Universidade Federal do Rio Grande do Sul - Professor

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

No



Eligibility Profile for John O'Neil - Co-Applicant

Appointment

As of 2021-01-01, will you be an independent researcher, practitioner, policy-maker, educator, decision-maker, health-care administrator, Indigenous elders, Indigenous knowledge keeper, community leader, individual working for a charity or other similar eligible position?

Yes

Choose the appointment type associated with your selected affiliation

Independent researcher

Affiliation

As of 2021-01-01, will your eligible appointment be with a federal, provincial, territorial or municipal government department or a for-profit organization?

No

Choose the affiliation associated with your eligible appointment

Simon Fraser University - Professor

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

No

Eligibility Profile for Tero Mustonen - Co-Applicant

Appointment

As of 2021-01-01, will you be an independent researcher, practitioner, policy-maker, educator, decision-maker, health-care administrator, Indigenous elders, Indigenous knowledge keeper, community leader, individual working for a charity or other similar eligible position?

Yes

Choose the appointment type associated with your selected affiliation

Independent researcher

Affiliation

As of 2021-01-01, will your eligible appointment be with a federal, provincial, territorial or municipal government department or a for-profit organization?

No

Choose the affiliation associated with your eligible appointment

Snowchange Cooperative - Independent Researcher

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

No



Eligibility Profile for Trevor Lantz - Co-Applicant

Appointment

As of 2021-01-01, will you be an independent researcher, practitioner, policy-maker, educator, decision-maker, health-care administrator, Indigenous elders, Indigenous knowledge keeper, community leader, individual working for a charity or other similar eligible position?

Yes

Choose the appointment type associated with your selected affiliation

Independent researcher

Affiliation

As of 2021-01-01, will your eligible appointment be with a federal, provincial, territorial or municipal government department or a for-profit organization?

No

Choose the affiliation associated with your eligible appointment

University of Victoria - Associate Professor

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

No



Eligibility Profile for Fiona Schmiegelow - Co-Applicant

Appointment

As of 2021-01-01, will you be an independent researcher, practitioner, policy-maker, educator, decision-maker, health-care administrator, Indigenous elders, Indigenous knowledge keeper, community leader, individual working for a charity or other similar eligible position?

Yes

Choose the appointment type associated with your selected affiliation

Independent researcher

Affiliation

As of 2021-01-01, will your eligible appointment be with a federal, provincial, territorial or municipal government department or a for-profit organization?

No

Choose the affiliation associated with your eligible appointment

University of Alberta - Director

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

No

Eligibility Profile for Murray Humphries - Co-Applicant

Appointment

As of 2021-01-01, will you be an independent researcher, practitioner, policy-maker, educator, decision-maker, health-care administrator, Indigenous elders, Indigenous knowledge keeper, community leader, individual working for a charity or other similar eligible position?

Yes

Choose the appointment type associated with your selected affiliation

Independent researcher

Affiliation

As of 2021-01-01, will your eligible appointment be with a federal, provincial, territorial or municipal government department or a for-profit organization?

No

Choose the affiliation associated with your eligible appointment

McGill University - Associate Professor

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

No

Eligibility Profile for Danika Littlechild - Co-Principal Investigator

Appointment

As of 2021-01-01, will you be an independent researcher, practitioner, policy-maker, educator, decision-maker, health-care administrator, Indigenous elders, Indigenous knowledge keeper, community leader, individual working for a charity or other similar eligible position?

Yes

Choose the appointment type associated with your selected affiliation

Independent researcher

Affiliation

As of 2021-01-01, will your eligible appointment be with a federal, provincial, territorial or municipal government department or a for-profit organization?

No

Choose the affiliation associated with your eligible appointment

Carleton University - Assistant Professor

Early Career Researcher (ECR)

Are you an early career researcher as defined by the New Frontiers in Research Fund?

Yes