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MEMORANDUM

ATTENTION Senate **DATE** March 21, 2024
FROM Dilson Rassier, Provost and Vice-President **PAGES** 1/18
Academic, and Chair, SCUP
RE: Termination of the Cooperative Resource Management Institute (CRMI) (SCUP 24-10)

At its meeting on March 20, 2024, SCUP reviewed and approved the termination of the Cooperative Resource Management Institute (CRMI). It is attached for the information of Senate.

C: Valorie Crooks, Associate Vice-President, Research



MEMORANDUM

ATTENTION Senate **DATE** March 21, 2024
FROM Dilson Rassier, Provost and Vice-President **PAGES** 2/18
Academic, and Chair, SCUP
RE: Establishment of the Aquatic Research Cooperative (ARC) Institute (SCUP 24-11)

At its meeting on March 20, 2024, SCUP reviewed and approved the establishment of the Aquatic Research Cooperative (ARC) Institute for a five-year term.

Motion: That Senate approve the establishment of the Aquatic Research Cooperative (ARC) Institute for a five-year term.

C: Valorie Crooks, Associate Vice-President, Research

Memorandum

From: Valorie Crooks, Associate Vice-President, Research pro tem Date: March 6, 2024

Re: Establishment of the Aquatic Research Cooperative (ARC) Institute and dissolution of the Cooperative Resource Management Institute (CRMI) *Valorie Crooks*

To: Dilson Rassier, Chair, *Ex-officio*, Senate Committee on University Planning (SCUP)

Attached is a proposal for the establishment of the Aquatic Research Cooperative (ARC) Institute, currently a SFU Research Centre named Cooperative Resource Management Institute (CRMI). The proposal is led by the current CRMI Director and the inaugural Director of the ARC Institute, Dr. Jonathan Moore, Professor, Department of Biological Sciences and School of Resource and Environmental Management, Faculty of Environment and Faculty of Science.

As stated directly in this application to establish the ARC:

Previously, CRMI has existed in the grey area between a Centre and an Institute, whereas the phrase “Institute” was in the title, but it was governed like a Centre under the authority of the Dean of the Faculty of Environment and there’s a need to revitalize this group. Thus, the proposed ARC Institute formalizes this agency-SFU collaborative as a formal institute to align with SFU policy. This formalized ARC Institute will help build upon CRMI’s existing reputation for collaboration, research excellence, and student training. This will help further attract students and funding.

One of the key reasons for establishing the ARC Institute is to enable the transformation of a current collaborative centre (The CRMI) so that it better aligns with SFU Policies. ARC’s goals align with the University priorities and VPRI’s Strategic Research Plan including: engagement and openness, equity and belonging, academic freedom and critical thinking, excellence and responsibility, resilience and sustainability. Establishing the ARC Institute will facilitate impactful collaboration between SFU and management agencies through sharing of resources, collaborative events, and training. ARC Institute will provide a platform for students, faculty, and staff from the university to work side-by-side with professionals from government agencies to tackle important and multifaceted questions in aquatic science. This provides substantive mutual benefits for the University, management agencies, and society.

The ARC Institute will help catalyze further collaborations in a group of applied aquatic scientists, from SFU and management agencies, that already have a remarkable history. The ARC Institute is the expansion of a former centre – the Cooperative Resource Management Institute (CRMI), and will be expanding in membership and scope. Within the CRMI, there is a long history of collaboration and co-supervision of students. The ARC Institute will have an increased membership to include additional SFU aquatic scientists from multiple departments and faculties that have a long and successful history of collaboration. The objectives do not overlap with any other institute or centre, other than CRMI, which will be dissolved upon the creation of ARC Institute.

The proposed institute is led by the Director alongside the Executive Council. The program lead (ex-officio voting Executive Council member) will govern in place of the Director, if the Director is not available. I, the

Associate Vice President, Research (non-voting ex officio Executive Council member) will be responsible for oversight.

The ARC Institute has received interest from external donors to provide long-term funding for student stipends, an annual external collaborator meeting, and salary for a research scientist/Program Lead (~\$4-5M endowment, in consideration). In addition, a grant proposal has been submitted to a partner agency, specifically to fund and build the collaborative aspect of the institute (\$380K over 2 years). We expect that the institute will continue to attract funding opportunities. In addition, members of the proposed institute have begun the process to submit and NSERC CREATE, which will help fund institute initiatives (student training, collaborative projects, and research scientist).

I recommend approval for establishment of the ARC as a Research Institute according to Policy R40.01.

Motions:

1. To approve the establishment of the Aquatic Research Cooperative (ARC) Institute for a 5-year term.
2. To dissolve the Cooperative Resource Management Institute (CRMI) simultaneously.

Attachments:

1. ARC Institute Application
2. Letter of support from the Dean of Faculty of Environment
3. Letter of support from the Dean of Faculty of Sciences
4. ARC Institute Constitution_Draft

SFU RESEARCH INSTITUTE APPLICATION

NAME OF INSTITUTE:

Aquatic Research Cooperative Institute

DESCRIPTION OF PROPOSED INSTITUTE:

Please include a statement of the Research Institute's special purpose and how its work aligns with University priorities and the VPRI Strategic Research Plan.

Statement of Special Purpose: The Aquatic Research Cooperative (ARC) Institute will be a central hub for collaboration between scientists from SFU and external agencies with the purpose to:

1. Train the next generation of applied aquatic ecosystem scientists. These students will have the opportunity to train alongside agency scientists as well as learn cutting edge scientific tools from across the Institute's professional network.
2. Perform applied research that addresses critical and emergent issues in aquatic science to inform the effective management and conservation of aquatic ecosystems and species.

Description: ARC Institute will provide a platform for students, faculty, and staff from the university to work side-by-side with professionals from government agencies to tackle important and multifaceted questions in aquatic science. ARC's goals align with the University priorities and VPRI's Strategic Research Plan including:

'Engagement and openness' – ARC's foundation is engagement and collaboration. ARC will bring together rightsholders, stakeholders, and managers in a neutral setting to co-develop research priorities and questions. For example, two Fisheries and Oceans Canada scientists are located on SFU Burnaby campus in REM, giving SFU scientists and students access to federal government staff, and training and resources.

'Equity and belonging' – ARC institute members have connections with rightsholders, stakeholders, and fisheries managers, and is a rare place where research questions can be co-developed alongside First Nations and local community members to do research that is aware of historical harms caused by science, works to build trust and relationships, and do science that is useful for society.

'Academic freedom and critical thinking' and 'Excellence and responsibility' – graduate student members of ARC will be co-supervised by provincial or federal agency scientists alongside SFU faculty. As a result, they will be trained in the use of cutting-edge scientific tools, gain experience and networks within associated agencies, and experience with multi-agency collaboration. SFU faculty will have access to agency scientists to co-develop research questions that aid in aquatic systems management.

'Resilience and sustainability' - The focal research conducted collaboratively among members collectively aims to improve management of aquatic systems to inform species management. The goal of many of the research programs in ARC is to improve the resilience of aquatic ecosystems, including salmon populations, and sustainability of fisheries.

RATIONALE FOR ESTABLISHING THE INSTITUTE:

Please include statements on the added value to the research collaborative and to the University in receiving this designation, as well as, any potential societal impact (beyond what would be accomplished by individual faculty members).

Establishing the ARC Institute will facilitate impactful collaboration between SFU and management agencies through sharing of resources, collaborative events, and training. This provides substantive mutual benefits for the University, management agencies, and society.

One of the key reasons for the ARC Institute is to enable the transformation of a current collaborative centre (The Cooperative Resource Management Institute; CRMI) so that it better aligns with SFU Policies. As per previous feedback provided to the Director of CRMI, there was encouragement for a name change so that it aligns with SFU policies (i.e., the word “research” is generally in the titles of Centres and Institutes). Thus, the proposed name change aligns with SFU Policies for naming conventions of Centres and Institutes, integrating the word “Research” into the title. The new name also now incorporates the word “Aquatic” to reflect the core strength of the cooperative. The proposed ARC Institute also provides some important clarity regarding the status of the CRMI. Previously, CRMI has existed in the grey area between a Centre and an Institute, where the phrase “Institute” was in the title, but it was governed like a Centre (under the purview of the Dean of the Faculty of Environment). Thus, the proposed ARC Institute formalizes this agency-SFU collaborative as a formal institute to align with SFU policy.

The previous CRMI has a long history of successfully facilitating agency-university collaboration, but there is a need and opportunity to revitalize this group. While the centre has been successful, adding additional members across faculties will add critical mass, and strengthen and formalize existing collaborations.

This formalized ARC Institute will help build upon CRMI’s existing reputation for collaboration, research excellence, and student training. This will help to further attract students and funding. For example, the proposed ARC Institute has already gained attention from external funders to fund student stipends, an annual external collaborator meeting, and a research scientist. The expansion in membership and scope will also increase the production of highly qualified personnel. There is high interest in CRMI graduands, with many having job offers before they complete their degrees. We have received feedback from employers that they would like to fund and hire more graduands, thus increasing funding to SFU and HQP training will help meet the demand for people trained in fieldwork, quantitative and collaborative skills that are required for a successful career in aquatic science.

The collaboration between SFU and management agencies will also enable university research to be highly impactful and relevant to the key challenges facing society today. Through deep collaboration and co-development, ARC Institute will tackle the urgent scientific questions and this information will feed into environmental policies and decision making and thereby provide direct benefits to society.

PRIOR TO APPLYING FOR RESEARCH INSTITUTE STATUS, MEMBER OF RESEARCH INSTITUTES SHOULD NORMALLY HAVE A HISTORY OF COLLABORATIVE ACTIVITY AS A GROUP.

e.g. co-supervision of students, co-publications, or shared research data, funding, and/or projects.

The ARC Institute will help catalyze further collaborations in a group of applied aquatic scientists, from SFU and management agencies, that already have a remarkable history. The ARC Institute is the expansion of a former centre – the Cooperative Resource Management Institute (CRMI), which will be expanding in membership and scope. Within this institute there is a long history of collaboration and co-supervision of students. Over the last five years, CRMI has produced over 240 papers and reports and trained over 50 graduate students. For example, Dr. Moore (current Director of CRMI and proposed initial Director of the ARC Institute) and Mr. Patterson (Fisheries and Oceans Canada; DFO) have jointly supervised over five students, jointly published seven papers and currently jointly supervise one graduate student. Similarly, Dr. Moore and Dr. Braun (DFO) have jointly published six papers and currently co-supervise two graduate students. Dr. van Poorten (REM) and Dr. Hodgson (DFO) currently co-supervise one graduate student and Dr. Chelsea Little (Environmental Sciences) and Dr. Sean Naman (DFO) currently co-supervise one graduate student. Dr. Hodgson, Dr. Salomon and Dr. Moore currently co-supervise one graduate student who is also supervised by Barbara Wilson, a Haida Nation Elder. Examples of collaborative grants that arose out of CRMI include research on cumulative effects (grants from DFO to Moore for ~\$380K over 4 years) and collaborative research on steelhead population dynamics and monitoring as supported by collaborative grants and projects between Drs. Davies (BC Provincial Scientist, CRMI member) and Moore and Reynolds.

The ARC Institute will have an increased membership to include additional SFU aquatic scientists from multiple departments and faculties that have a long and successful history of collaboration. For example, Drs. Dulvy, Coté, and Palen are all potential future ARC members, as they currently work closely with Moore and Reynolds (currently

CRMI members) as part of the Earth2Ocean Research Group. Earth2Ocean is widely recognized as a powerhouse of applied aquatic ecology at SFU, and the ARC Institute would foster these connections.

IF THE OBJECTIVES OF THE PROPOSED INSTITUTE OVERLAP WITH AN EXISTING RESEARCH CENTRE OR INSTITUTE, PLEASE PROVIDE EVIDENCE OF CONSULTATION WHERE A POTENTIAL CONFLICT HAS BEEN IDENTIFIED.

The objectives do not overlap with any other institute or centre, other than CRMI, which will be dissolved upon the creation of ARC Institute.

PROPOSED DIRECTOR(S):

Please include a statement on the provision for the appointment of the Director.

The proposed Director is Dr. Jonathan Moore. Dr. Moore is cross-appointed in both the Faculty of Environment and the Faculty of Science. He is currently the director of CRMI and has been in this position since 2017.

INTERNAL GOVERNING PROCESS:

The proposed institute is led by the Director alongside the Executive Council. The Director will preside at all meetings, represent the institute at departmental/faculty meetings, and make appointments and perform other duties and functions as authorized. The Director and voting members of the Executive Council will make decisions with respect to budgets, finances, grant applications on behalf of the Institute, and appoint and dissolve special committees. The Director has a term of five years, and the other Executive Council members have terms of 2 years. The program lead (ex-officio voting Executive Council member) will govern in place of the Director, if the Director is not available. The Associate Vice President of Research (non-voting ex officio Executive Council member) is responsible for oversight. General Council members are responsible for voting for membership on the General and Executive Councils and make up the special committees. The Advisory Council (non-voting members) will provide advice on funding opportunities and/or direction of research.

MEMBERSHIP:

Name	Position	Department	Faculty	Institution	Status
Dr. Jonathan Moore	Professor	Department of Biological Sciences/School of Resource and Environmental Management	Environment/Science	SFU	Current CRMI member
Dr. Brett van Poorten	Assistant Professor	School of Resource and Environmental Management	Environment	SFU	Current CRMI member
Dr. Chelsea Little	Assistant Professor	Environmental Science/ School of Resource and Environmental Management	Environment	SFU	Current CRMI member
Dr. Scott Harrison	Senior Lecturer	School of Resource and Environmental Management	Environment	SFU	Current CRMI member

Dr. John Reynolds	Professor	Department of Biological Sciences	Science	SFU	Current CRMI member
David Patterson	Adjunct Professor/ Research Scientist			DFO	Current CRMI member
Dr. Doug Braun	Adjunct Professor/ Research Scientist			DFO	Current CRMI member
Dr. Trevor Davies	Adjunct Professor/ Fisheries Stock Assessment Specialist			BC Ministry of Water, Land and Resource Stewardship	Current CRMI member
Dr. Emma Hodgson	Adjunct Professor/ Research Scientist			DFO	Current CRMI member
Dr. Sean Naman	Adjunct Professor/ Research Scientist			DFO	Current CRMI member
Dr. Dan Selbie	Adjunct Professor/ Program Head, Lakes Research Group			DFO	Current CRMI member
Dr. Kyle Wilson	Assistant Professor (starting July 2024)	School of Resource and Environmental Management	Environment	SFU	Current CRMI member
Andrés Cisneros-Montemayor	Assistant Professor	School of Resource and Environmental Management	Environment	SFU	To be considered
Dr. Shaun Chartrand	Professor	School of Environmental Science	Environment	SFU	To be considered
Dr. Anne Salomon	Professor	School of Environmental Science	Environment	SFU	To be considered
Dr. Nick Dulvy	Professor	Department of Biological Sciences	Science	SFU	To be considered

Dr. Wendy Palen	Professor	Department of Biological Sciences	Science	SFU	To be considered
Dr. Isabelle Coté	Professor	Department of Biological Sciences	Science	SFU	To be considered
Additional affiliate members from external management agencies will be encouraged and considered					

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ORGANIZATION STRUCTURE:

The proposed institute is led by the Director alongside the Program Lead and Executive Council. The Executive Council is made up of the Associate Vice President of Research (non-voting ex officio member) and voting members – more than 2 members of the General Council, the Program lead (ex-officio) and the Director. The General Council is made up of voting members, typically principal investigators from both SFU and partner agencies. General members are de facto non-voting members such as students and post docs. There will be an Advisory Council of non-voting members that will provide advice to the Executive Council. See Fig 1.

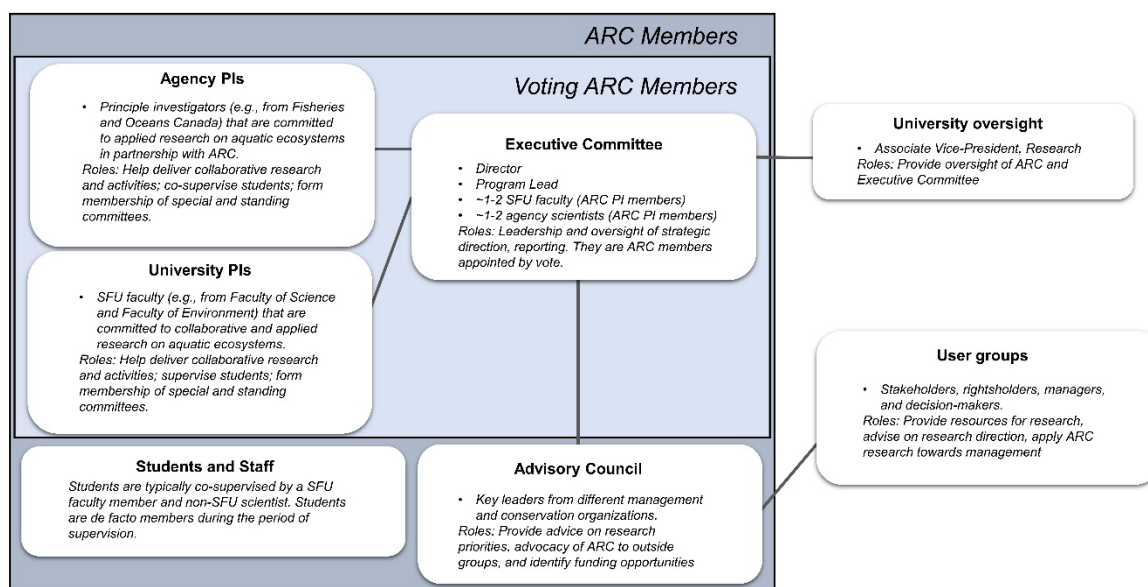


Figure 1: Organizational structure of proposed ARC Institute

PROCEDURES FOR RATIFYING NEW MEMBERS:

A majority vote of General Council members will ratify new members.

AFFILIATES:

ARC Institute members are often employees of Fisheries and Oceans Canada, or BC Ministry of Water, Lands and Resource Stewardship. Advisory Council members will likely be from those organizations, as well as other key management organizations such as BC Hydro and Pacific Salmon Commission, and Indigenous organizations such as First Nations Fisheries Council.

TRAINING AND MENTORSHIP OPPORTUNITIES FOR STUDENTS:

ARC Institute will offer graduate students the opportunity to be co-supervised by agency and SFU researchers. Currently, proposed Institute members are currently co-supervising five graduate students. Graduate students in ARC Institute will have the rare opportunity to learn research skills from both academia, and government researchers, be trained for a career in fisheries management, and will be linked in with a network of scientists and future employers. Many previous CRMI graduates have gone on to successful careers in the federal government.

RESEARCH INSTITUTE 5-YEAR GOALS AND KEY PERFORMANCE INDICATORS:

1. **IMPACTFUL SCIENCE**--The development, application, and uptake of science to improve the health of Canada's aquatic ecosystems for people and nature.

This will be evidenced by:

- Delivery of collaborative events, as evidenced by at least one collaborative event per year that links SFU and partner organizations.
- Attract funding for collaborative research, as evidenced by at least 5 successful proposals within the next 5 years that represent collaborations among ARC Institute's SFU and agency scientists.
- Successful delivery of collaborative science, as evidenced by papers, scientific conference proceedings, and student theses.

2. **TRAIN FUTURE LEADERS**—The Institute will be a hub for training graduate students to emerge as the next generation of scientists, managers, and leaders.

This will be evidenced by:

- Successful training of graduate students in applied ecology, as evidenced by at least 5 co-supervised graduate students at any given time.
- Graduation of graduate students, and the rate of 6mo employment of graduands.
- Directed training through workshops provided to graduate students, and external collaborators

CURRENT RESOURCES AND FUTURE SUSTAINABILITY:

Currently, CRMI operates with minimal core funding and is based on project and graduate student specific collaborations. While this model has been productive (e.g., 240 papers and reports and trained over 50 graduate students in last 5 years), we aim to transition to an elevated model where we secure long-term core funding for ARC Institute staff and activities.

Collaborations:

By establishing as an Institute, current collaborations can continue and expand, and new collaborations can be facilitated. Current collaborations include:

- Dr. Moore and Mr. Patterson have, in the past, jointly supervised over five students, jointly published seven papers and currently jointly supervise one graduate student.
- Dr. Moore and Dr. Braun have jointly published six papers and currently co-supervise two graduate students.
- Dr. van Poorten and Dr. Hodgson currently co-supervise one graduate student
- Dr. Chelsea Little and Dr. Sean Naman currently co-supervise one graduate student.

The proposed institute also includes proposed members not currently in CRMI such as:

- Dr. Dulvy and Dr. Coté whom have co-supervised students alongside Dr. Moore.
- Dr. Moore, and Mr. Patterson jointed funded a project to research the Big Bar landslide and jointly supervise three post-docs.
- Dr. Hodgson, Dr. Salomon and Dr. Moore currently co-supervise one graduate student who is also supervised by Barbara Wilson, a Haidi Nation Elder.

Funding—pending and proposed:

The ARC Institute has received interest from external donors to provide long-term funding for student stipends, an annual external collaborator meeting, and salary for a research scientist/Program Lead (~\$4-5M endowment, in consideration). In addition, a grant proposal has been submitted to a partner agency, specifically to fund and build the collaborative aspect of the institute (\$380K over 2 years). We expect that the institute will continue to attract funding opportunities. For example, the members of the Advisory Council will be chosen based, partly, on their

connections and knowledge of funding opportunities. In that way, the Advisory Council can help connect funding from partner organizations to ARC Institute.

Additionally, members of the proposed institute have begun the process to submit and NSERC CREATE, which will help fund institute initiatives (student training, collaborative projects, and research scientist).

Sustainability Plan:

A key part of establishing ARC Institute is development of a research scientist (Program Lead). Establishing an Institute will help formalize and attract funding for this position. This position will play a key communications and operations role in the future sustainability of the Institute through writing grants, facilitating new initiatives and collaborations, providing directed training opportunities for students, and conducting science. We have already identified a candidate for this position in Dr. Samantha Wilson. Dr. Wilson is a graduate of SFU and has a background in building large collaborations, and a strong history of publication and student training.

CRMI already has an excellent reputation and changing to an Institute will assist us with expanding in scope and capacity. Scientists from partner organizations have already approached us to join ARC Institute, thus we don't anticipate any issues identifying new partners.

WOULD THE ESTABLISHMENT OF THIS INSTITUTE ENABLE THE MEMBER RESEARCHERS TO ATTRACT FUNDING BEYOND WHAT THEY WOULD BE ABLE TO DO ON THEIR OWN? PLEASE EXPLAIN.

Yes. The proposed institute has already received interest from external funders to fund student stipends, an annual meeting for external collaborators, and salary for a research scientist. The research scientist/Program Lead will be responsible for writing additional grants, thus leveraging funding for future grants and long-term sustainability of the institute. Additionally, members of the proposed institute have started the process for applying for an NSERC CREATE – which is specifically for funding large collaborative inter-agency projects centred around training. More generally, by establishing a formal institute and collaborative structure, the institute will foster the relationships and opportunities that can attract funding for collaborative projects.

COMMUNICATION PLAN:

Provide a description of a communication plan that is aligned with University Communication policies, including plans for maintaining an up-to-date web/social media presence.

Research opportunities and research findings will be communicated through a website, which is currently being completed. This website brings together research from across all of the research groups (both SFU and agencies), highlights collaborative projects, achievements, news stories, publications, and theses.

ARC Institute will also produce an annual report which highlights achievements, current projects, and students trained.

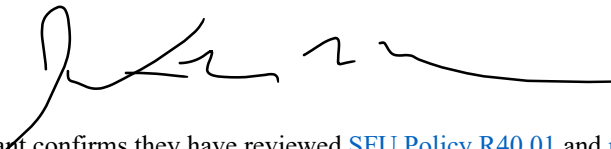
EVIDENCE OF SUPPORT:

Please include evidence of support from the Dean or Associate Dean, Research of the home Faculty of the proposed Institute Director (mandatory).

Applicants may feel free to submit additional supporting documents such as letters of support and constitutions (if available).

Date: 3/5/2024

Applicant Signature:



By signing this form, the applicant confirms they have reviewed [SFU Policy R40.01](#) and [related Procedures](#) and agrees to conduct its activities in accordance with University policies.

Senate Committee of University Priorities,

I enthusiastically support the evolution of the Cooperative Resource Management Institute (CRMI) to become the Aquatic Research Institute (ARC). Institutes that foster collaboration in science to inform policy, action, and cooperation around healthy ecosystems is essential for the future of British Columbia, and moreover the planet. The ARC Institute will be a hub of collaboration, providing enhanced training opportunities to graduate students and research opportunities to deepen existing connections within and across faculty. In particular, the ARC Institute will serve as a connection point between external agencies, such as Fisheries and Oceans Canada and SFU, which will help to catalyze new connections within SFU and the broader aquatic research and policy community.

This Institute represents a natural evolution from the existing Cooperative Resource Management Institute (CRMI). CRMI is a research centre that has a long history within the Faculty of Environment. Under the previous leadership of Dr. Randall Peterman of the CRMI, the Faculty of Environment and SFU were known as leaders in applied fisheries science, connecting university capacity and training with key management agencies. While fiscal support from federal agencies has waned over the years, CRMI continues to link agency and SFU science with cutting edge science and its application. ARC is well poised to also attract donor funding given the societal level concerns about connections between climate change and aquatic systems' health.

A resurgence of leading research and program growth is presently underway with additions of several key hires (Drs. Kyle Wilson, Brett Van Poorten). There has also been recent interest from external funders to provide stable, long-term funding for this institute. This institute would expand to further strengthen the ties between Faculty of Environment and Faculty of Science (and other faculties), as well as deepen engagement with external agencies. SFU can continue to lead innovative research in salmon and aquatic ecology of northern rivers in a time of rapid climate change and industrialization and human demands on salmon resources. The need has never been greater and the institutional capacity has never been higher.

I endorse the ARC initiative to maintain SFU's leadership in salmon research and aquatic research in general. ARC's approach is proven, is staffed with excellent personnel, represents a flagship initiative, and is showing itself to attract significant funding to SFU for program advancement. Salmon ecology links topical areas spanning inland land use and coastal zone development and oceanic blue zones, thus, the span of ARC topics has deep linkages with numerous faculty on topics as diverse as fluvial ecology, Indigenous stewardship, and forest ecology in salmon watersheds.

The current Director of CRMI, Jonathan Moore, an outstanding scholar, public intellectual and collaborator with First Nations, is willing to initially serve as Director for ARC for two years, and I have no doubt this would all the more galvanize the work of ARC for the years to come.

Respectfully,



Naomi T. Krogman, Dean, Faculty of Environment, SFU



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March 4, 2024

Senate Committee of University Priorities,

I am very supportive of the creation of the Aquatic Research Cooperative (ARC) Institute. The Institute will bring together researchers from within and outside of SFU and create new opportunities for training graduate students, research, and funding initiatives.

The aquatic research focus of the ARC institute aligns with the expertise of many faculty members in the Faculty of Science. In particular, faculty members from the Earth-to-Oceans research group, a highly productive and impactful research group, would benefit from deepened collaboration with other Faculties and other partners.

This Institute would help foster connections within and outside of SFU and strengthen existing connections between the Faculty of Science and the Faculty of Environment. For example, students in the Earth-to-Oceans research group and students from REM have held an annual symposium to facilitate sharing of ideas, and this and other efforts would be strengthened and supported through an Institute. The institute will also facilitate access to federal government scientists, and resources by formally connecting Faculty of Science members, with the two on campus Fisheries and Oceans scientists housed in REM. The connections that the institute will house will create a powerhouse of cutting-edge applied and impactful research.

I am highly supportive of the formation of the ARC Institute.

Sincerely,

A handwritten signature in blue ink, appearing to read "Angela Brooks-Wilson". The signature is fluid and cursive, written over a light blue horizontal line.

Angela Brooks-Wilson
Dean, Faculty of Science
Simon Fraser University

Aquatic Research Cooperative (ARC) Institute

Proposed Governance Structure and Constitution

Article I. Name and Special Purpose

- The name of this Institute shall be the Aquatic Research Cooperative (ARC) Institute, herein referred to as the Institute.
- The activities of the Institute shall be conducted in accordance with Simon Fraser University, herein referred to as the University, policies and procedures.

Section 1.01 Statement of special purpose

- The Institute's main purpose is to form a central hub for collaboration between SFU scientists from multiple faculties (e.g., Faculty of Science, Faculty of Environment) and external agencies with the purpose to:
 1. Train the next generation of aquatic ecosystem scientists. These students will have the opportunity to train alongside agency scientists as well as learn cutting edge scientific tools from across the Institute's professional network.
 2. Perform research that addresses critical and emergent issues in aquatic science to inform species management and conservation.
- The Institute's objectives will reflect Simon Fraser University's Strategic Research Plan.
- The objectives of the Institute must not significantly overlap with other SFU Research Centres or Research Institutes. If a conflict arises, a consultation shall take place to avoid potential conflicts.

Section 1.02 Training and mentorship opportunities

- Graduate student members of the Institute shall have two or more General Council Institute members on their supervisory committee. Supervisory committees should typically have one SFU member and one agency member.
- Post-doctoral fellows and staff will report jointly to two or more General Council Institute members, typically an SFU member and an agency member.

Article II. General Membership

- The members of the Institute shall be composed of students, faculty, staff, or affiliated members of Simon Fraser University.
- Students and post-doctoral researchers shall not be voting members of the Institute.
- Students and post-doctoral researchers shall be *de facto* members of the Institute as long as they are under the supervision of General Council member(s).

Section 2.01 Duties of General Membership

- All members of the Institute shall conduct some research relevant to the Special Purpose and goals of the Institute.
- All members will provide a list of achievements (e.g., publications, presentations, news coverage, seminars) and milestones to the Program Lead by May 1st for the annual report.

Article III. General Council Membership

- General Council members of the Institute shall be composed of two main groups:
 - faculty or staff of Simon Fraser University that typically hold principle investigator status (e.g., tenure-track professor, adjunct professor).
 - Agency scientists or leaders that are motivated for agency-university collaboration and are employed by non-University entities (e.g. Fisheries and Oceans Canada). Both member classes shall be equal.
- Council members shall be voting members of the Institute.

Section 3.01 Election of general council members

- Nominations of General Council members shall be handled by the Program Lead.
- Nominations shall be completed at least two weeks in advance of the vote.
- New General Council members must be voted in by a majority vote of existing General Council members.

Section 3.02 Duties of General Council members

- Each member of the General Council shall have one vote in General Council decisions. In the event of a tie, the Director's vote shall be the deciding vote.
- General Council Members of the Institute shall work collaboratively, typically conducting research alongside at least one other member of the Institute.
- It is expected that General Council Institute members co-supervise graduate student members of the Institute. Therefore, in most years General Council members should sit on at least one graduate student committee or supervise one post-doctoral fellow.
- General Council Members are responsible for voting for the Executive Council and for admitting new General Council Members.
- General Council members may sit on special or standing committees.
- General Council members will vote on Advisory Council membership

Article IV. Executive Council

Section 4.01 Executive Council Membership

- The executive council shall consist of a Director, Program Lead, Associate Vice President, Research and more than two appointed General Council members.
- The Program Lead, and Associate Vice President, Research shall be *ex officio* members of the Executive Council.
- Executive Council members shall typically have representation from all major affiliate groups within the Institute.

Section 4.02 Non-voting members of Executive Council

- The Associate Vice President, Research shall be a non-voting member and provide a supervisory role.

Section 4.03 Voting members of Executive Council

- Except for the Director all voting members of the Executive Council shall hold a term of two years.
- All voting members of the Executive Council shall be members of the General Council.
- Each voting member of the Executive Council shall have one vote in Executive Council decisions. In the event of a tie, the Director's vote shall be the deciding vote.

(a) Election of Executive Council Members (non ex officio members)

- Executive Council members shall be nominated by a General Council member during the nomination period set by the Executive Council which will be typically in the fall semester.
- Nominations shall be handled by the Program Lead.
- Nominations shall be completed at least two weeks in advance of the vote.
- Executive Council members must be voted in by a majority vote of General Council members.
- Terms of the newly elected Executive Council members begin at the meeting in which they are voted in by a majority.

Section 4.04 Duties of the Executive Council

- Each member of the Executive Council shall have one vote in Executive Council decisions. In the event of a tie, the Director's vote shall be the deciding vote.
- Executive Council members shall be responsible for creating new special committees.
- Executive Council members shall provide strategic oversight alongside the Director and Program Lead.
- Budgetary and financial decisions shall be made by the Executive Council. In special circumstances, some financial advice may come from a special committee, but the final vote will be made by the Executive Council.
- Executive Council members shall approve all grant applications in the name of the Institute as a whole (i.e. not for individual PI's or small groups of PI's).
- Executive Council members shall be involved in the hiring of the Program Lead.

Article V. Program Lead

The program lead is an *ex officio* voting member of the Executive Council, and General Council.

Section 5.01 Duties of the Program Lead

- The Program Lead shall:
 - assume the duties of the Director, if the Director is absent or unable to act.
 - assist with event planning and general group logistics.
 - provide strategic oversight alongside the Director and Executive Committee.
 - maintain a record of the Institute General and Executive Council meetings and relevant decisions and share meeting minutes with General Council.
 - handle the nomination of the general, executive, and advisory councils.
 - tally and record all votes.
 - maintain a contact list of all members.
 - maintain an up-to-date web/social media presence that includes a list of members and research activities.

- During the nominations and voting period for the Director and Executive Council nomination, the program lead shall abstain from voting.
- The person holding the position of Program Lead shall be appointed for an initial five year term, with additional formal review every three years.

Article VI. Director

- The Director shall hold a term of five years.
- The Director must be a member of the General Council.

Section 6.01 Election of Director

- The Director shall be nominated by a General Council member during the nomination period set by the Executive Council which will be typically in the spring prior to the Directorship ending.
- Nominations shall be handled by the Program Lead.
- Nominations shall be completed at least two weeks in advance of the vote.
- The Director must be voted in by a majority vote of General Council members.
- The term of the newly elected Director begins at the meeting in which they are voted in by a majority.

Section 6.02 Duties of the Director

- The Director shall:
 - preside at meetings, represent the institute at departmental meetings, and make appointments and perform other duties and functions as authorized.
 - Provide strategic oversight on the direction of the Institute, alongside the Program Lead and Executive Committee.
 - lead the annual reporting for the Institute which occurs once annually for the twelve months ending March 31 of each year. Submission must occur by no later than June 30 of each year.
 - oversee committees and special initiatives.

Article VII. Advisory Council

- The Advisory Council shall consist of members of partner organizations, such as from federal, provincial government, First Nations, industry leaders, and non-profit organizations.
- Advisory Council members cannot vote in General or Executive Council decisions.
- Advisory Council members shall not be members of the Institute.

Section 7.01 Election of the Advisory Council

- The Advisory Council members shall be nominated by any General Council member.
- Nominations shall be handled by the program lead.
- Nominations shall be completed at least two weeks in advance of the vote.
- Advisory Council members must be voted in by a majority vote of General Council members.
- Advisory Council members shall have a term of three years.

Section 7.02 Duties of the Advisory Council

- The Advisory Council shall:

- Provide timely advice for research direction and funding opportunities to the Executive Council.
- Attend gatherings as appropriate and provide feedback on key directions and opportunities

Article VIII. Meetings

The Institute shall hold at least one meeting annually at a time and place designated by the Director. When possible, the meeting shall occur at least partially online or via conference call so non-campus members can attend.

Article IX. Committees

The Executive Council shall appoint all standing and special committees and chairpersons of committees that are necessary for the conduct of Institute activities. Terms of office for members of special committees shall end upon discharge of the duties for which they were appointed or will be set by mutual agreement and approval of the Executive Council. Terms shall not last more than two years.

Article X. Voting

Business and voting may be conducted in person, via mail or electronic media.

Article XI. Dissolution

Dissolution of the Institute shall follow University Policies and Procedures outlined in Policy R 40.01, Procedures for Research Institutes, section 5 renewing and discontinuing research institutes.

Article XII. Amendments to the Constitution

The Constitution is the defining document for the Institute and takes precedence over all other rules and procedures of the Institute. The Constitution cannot be suspended and cannot be changed without prior notice to members. The Constitution is superseded by University policies and procedures outlined in Policy R40.01 and Policy B10.11.

The Constitution may be amended by a 2/3 majority of General Council members of the Institute choosing to vote, provided that the proposed amendment(s) are circulated to the membership at least 14 days prior to voting.

Prior to voting, the amendment must be reviewed and approved by the Executive Council to ensure that it does not conflict with the existing Constitution and University Policies and Procedures.

Where not outlined above, the Institute shall follow the policies and procedures outlines in R 40.01