COUNCIL COMMITTEE ON RESEARCH
Thursday 3 December 2020 – 2:30 to 4:00 pm

AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda Items</th>
<th>Lead</th>
<th>Material</th>
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<tr>
<td>2:30 pm</td>
<td>Approval of Agenda</td>
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<tr>
<td>2:32 pm</td>
<td>Approval of Meeting Minutes from November 19, 2020</td>
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<td>Appendix 1</td>
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<tr>
<td>2:35 pm</td>
<td>Chair’s Report</td>
<td>Al-Anbagi</td>
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<tr>
<td>2:45 pm</td>
<td>VP Research Report</td>
<td>McNutt</td>
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<td>2:55 pm</td>
<td>Indigenous Research Showcase Update</td>
<td>Gray</td>
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<tr>
<td>3:00 pm</td>
<td>Fedoruk Chair in Neutron Imaging</td>
<td>Farenick</td>
<td>Appendix 2</td>
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<tr>
<td>3:15 pm</td>
<td>Tier 1 CRC in Computational Learning Theory</td>
<td>Farenick</td>
<td>Appendix 3</td>
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<tr>
<td>3:30 pm</td>
<td>Research Impact Subcommittee</td>
<td>Al-Anbagi</td>
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<tr>
<td>3:40 pm</td>
<td>Research Space Allocation Subcommittee</td>
<td>Yost</td>
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<td>3:50 pm</td>
<td>Business Arising</td>
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<td>4:00 pm</td>
<td>Adjournment</td>
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CCR Subcommittees

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<tr>
<th>Standing</th>
<th>Ad-hoc</th>
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<td>• CFI</td>
<td>• Research Impact&lt;br&gt;• Research Space Allocation&lt;br&gt;• Terms of Reference&lt;br&gt;• Covid-19 Return to Research</td>
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Distribution

<table>
<thead>
<tr>
<th>Kathy McNutt, VP Research</th>
<th>Cory Butz, Science</th>
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<tbody>
<tr>
<td>Chris Yost, AVP Research</td>
<td>Gabriela Novotna, Social Work</td>
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<td>Nick Jones, Graduate Student &amp; Research</td>
<td>Christina Winter, Library</td>
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<td>Sally Gray, Director, Research Office</td>
<td>David Meban, Campion College</td>
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<td>Raymond Blake, Arts</td>
<td>Francesco Freddolini, Luther College</td>
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<tr>
<td>Lisa Watson, Business Administration</td>
<td>Bettina Schneider, First Nations University of Canada</td>
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<td>Twyla Salm, Education</td>
<td>Sandra Zilles, CRC Rep.</td>
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<tr>
<td>Amr Henni, Engineering &amp; Applied Science</td>
<td>Nathalie Reid, CTRC</td>
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<tr>
<td>Jim Farney, Johnson-Shoyama Graduate School</td>
<td>Irfan Al-Anbagi – Council Member (Chair of CCR)</td>
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<tr>
<td>Larena Hoeber, Kinesiology &amp; Health Studies</td>
<td>Sheila Petty, Council Member, MAP</td>
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<td>Christine Ramsay, Media, Art &amp; Performance</td>
<td>Shrinath Manoharan, Graduate Student Association</td>
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<td>Joan Wagner, Nursing</td>
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Guest

Doug Farenick

Join Zoom Meeting

https://uregina-ca.zoom.us/j/97923393227?pwd=YWIDNHhrWINXMjZKWFlwQ0FKMWthdz09
Meeting ID: 979 2339 3227
Passcode: 832735
COUNCIL COMMITTEE ON RESEARCH
Minutes of the Meeting of
Thursday 19 November 2020
11:00 am – 12:00 pm

Present: I Al-Anbagi (Chair), R Blake, C Butz, B Dupeyron (for J Farney), S Gray, A Henni, L Hoeber, N Jones, K McNutt, D Meban, G Novotna, S Petty, C Ramsay, N Reid, T Salm, L Watson, C Winter, C Yost

Regrets: F Freddolini, S Manoharan, B Schneider, J Wagner, S Zilles

Resource: L Todd

Guests: M Beitel

APPROVAL OF AGENDA
Ramsay/Petty

Moved that the agenda be approved as presented. CARRIED

APPROVAL OF MEETING MINUTES FROM OCTOBER 8, 2020
Ramsay/Petty

Moved that the minutes from October 8, 2020 be approved as presented. CARRIED

CHAIR’S REPORT
I Al-Anbagi advised that K McNutt e-mailed Research about SciVal. An account has been created and it was suggested that faculty use this tool. It was suggested that possibly having the Research Impact Subcommittee look to see how we can use this tool to improve research impact.

Concern was raised regarding community based research not being evaluated the same way. It was very hard to measure community research; hopes the subcommittee categorizes and classifies this research.

Another concern was raised regarding building a culture of competition with other piers. How does it build a collaborative versus competitive culture? It was pointed out that this is just one tool, of many, how we measure impact. There is nothing in there about performance. It was suggested that we use the subcommittee to help communicate the advantages of using this tool and to set up special training sessions with our colleagues.
I Al-Anbagi advised that R Blake’s report was highlighted at the last Executive of Council meeting. He thanked R Blake for all his work over the past years.

**VICE-PRESIDENT (RESEARCH) REPORT**
K McNutt welcomed N Reid as the representative for the Research Centres. She also welcomed B Dupeyron, who is representing Johnson-Shoyama Graduate School at this meeting (in J Farney’s absence).

K McNutt restated that SciVal is just one tool that you can use if you wish. She advised that she is working with M Stewart regarding community based research. They are looking at the impacts of community based research.

K McNutt also advised:
- they received two CFI grants in Science; just shy of $3.0 million
- they are going forward in January with two new research chairs
- we do not have to go external any longer
- faculties can submit more than one application

**CCR DECISION ON DISSOLVING SUBCOMMITTEES**
I Al-Anbagi advised that discussion took place at the last CCR meeting regarding dissolving subcommittees, but no formal decision/motion was made. Further discussion took place the CCR Standing Subcommittees.

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<th>Yost/Gray</th>
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<td>Moved that the NSERC and Research Trust Fund/Sabbatical Research Grant subcommittees be dissolved.</td>
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Discussion took place regarding the Ad-hoc Subcommittees and it was determined that these subcommittees will remain. It was suggested that we re-establish the Research Impact Subcommittee and put out a Call for Volunteers. Ideally we would like three volunteers with one being an elected member.

**INDIGENOUS RESEARCH SHOWCASE UPDATE**
S Gray provided an update on the Indigenous Research Showcase. There will be a workshop on November 5 on community perspectives. She hasn’t heard about any other events at this point.

**GABRIEL DUMONT CHAIR IN MÉTIS/MICHIF EDUCATION PROPOSAL**
T Salm briefly review the proposal for the establishment of the Gabriel Dumont Research Chair in Métis/Michif Education within the Faculty of Education.
Moved that the Council Committee on Research approval the proposal for the establishment of the Gabriel Dumont Research Cahir in Métis/Michif Education within the Faculty of Education.

CARRIED

C Yost advised that we will try to get this on the November 25 Executive of Council agenda, however the deadline was last week so it may not be accepted.

BUSINESS ARISING
I Al-Anbagi advised that the third elected member of CCR position is vacant. We will hopefully have a new member at the next Executive of Council meeting.

ADJOURNMENT
T Salm moved that the meeting be adjourned at 11:38 am.
November 20, 2020

Dr Irfan Al-Anbagi, Chair
Council Committee on Research
University of Regina

Dear Dr Al-Anbagi,

Enclosed is a proposal for an externally-funded Research Chair for which I seek the approval of the Council Committee on Research. Unconditional approval or approval in principle for the Research Chair would allow me to pursue the acquisition of external funds from the Sylvia Fedoruk Centre for Nuclear Innovation in support of the Chair.

Thank you for your consideration in this matter.

Sincerely,

[Signature]

Douglas Farenick
Dean, Faculty of Science

Cc: C. Butz, Associate Dean (Research) of Science
    Z. Papandreou, Head of the Department of Physics
UNIVERSITY OF REGINA
Council Committee on Research

Proposal: Federal Chair in Neutron Imaging

Submitted by: Douglas Farenick, Dean
Faculty of Science
University of Regina

Executive Summary:
The present proposal is for a five-year research chair in the area of neutron imaging, with principal funding (still to be approved) coming from the Sylvia Fedoruk Canadian Centre for Nuclear Innovation in Saskatoon, Saskatchewan. If approved and funded, a tenure-track Assistant Professor of Physics would be recruited by the Faculty of Science to assume the Chair and this individual would transition to a base-budgeted faculty position in the Department of Physics at the completion of the five-year term. (The faculty position would be with tenure, if the Chair holder had been awarded tenure at, or prior to, the end of the Chair’s term, or remain tenure-track if the Chair holder were still eligible to hold a tenure-track position and had not yet been awarded tenure at the end of the Chair’s term.) The Faculty of Science has used this research-chair model successfully in the recent past to recruit a Federal Chair in Nuclear Imaging (Dr Aram Teymurazyan) who is now a tenured Associate Professor of Physics. The area of research for the proposed chair represents an important opportunity for Saskatchewan to develop a niche in neutron beam research.

Background and Description:
In January 2020, stakeholders in the Canadian Neutron Initiative (CNI) met in Ottawa to develop a strategic vision for Canada in the area of neutron research. The strategy has four objectives: to build upon existing domestic capabilities to enhance Canada’s research expertise in neutron research and applications; to develop new national and international partnerships; to explore future investment in domestic neutron sources; and to create a national governance and management framework. The Sylvia Fedoruk Canadian Centre for Nuclear Innovation, as Saskatchewan’s cornerstone for nuclear-related research and development, seeks to raise the level of Saskatchewan’s engagement in the Canadian Neutron Initiative.

In several conversations throughout 2019 and 2020 involving the Dean of Science (Douglas Farenick), the Head of the Department of Physics (Zisis Papandreou), and the Executive Director of the Fedoruk Centre (John Root), the possibility of an externally-funded Chair emerged. After consultation with and approval from the Department of Physics, a letter of interest was submitted by Drs Farenick and Papandreou on August 24, 2020, to the Board of the Fedoruk Centre. The Fedoruk Centre responded with an invitation to submit a full proposal in December 2020.

In the University’s Department of Physics, the majority of the researchers work in experimental subatomic and applied physics, and possess extensive experience in international collaborative efforts and partnerships. In particular, the Department has expertise in exploiting domestic and international facilities, participating in the establishment of collaborations and their management plans, and in holding key leadership positions in such organisations. Their experience in working at the Canadian particle accelerator TRIUMF and at the Jefferson Laboratories in the USA would be valuable in supporting and mentoring the Chair, as the Fedoruk Chair in Neutron Imaging would be required to travel out of province to undertake neutron-imaging experiments. (Depending on the
specific expertise of the individual appointed to the Chair, possible locations may include the neutron radiation facilities at the McMaster Nuclear Reactor or other facilities in the USA and Europe.)

Previous CCR and Board of Governors Related Approvals:

The Fedoruk Chair in Nuclear Imaging — approved 2015

Implications:

Strategic. Of the five strategic priorities articulated in the University of Regina’s Strategic Plan, All Our Relations, for 2020-2025, the activities of the Fedoruk Chair in Nuclear Imaging will contribute to the University’s strategic priority in Discovery, not only in terms of excellence in teaching and research with community connections, but also in terms of student success (for example, in developing career-ready students). The Fedoruk Chair in Nuclear Imaging will be strongly encouraged by leadership in the Faculty of Science to recruit young scholars and students with diverse backgrounds, as well as Saskatchewan indigenous students, to the Chair’s research teams and projects.

Canada’s future competitiveness relies on the development of innovative materials in priority areas, such as in clean energy and technologies, advanced manufacturing, and biomedical and life sciences. Neutron beams are versatile and irreplaceable tools for materials research, and neutron imaging is a key aspect of visualizing and studying the internal structures and functions of inorganic and organic materials. The impact of the proposed Chair on developing Saskatchewan-based expertise in neutron science will be substantial.

Financial.
The five-year financial plan (still to be approved by the Fedoruk Centre) is as follows.

The Sylvia Fedoruk Centre for Nuclear Innovation: $1,000,000

1. Annual salary and benefits: $150,000 per year. Annual expenditures exceeding $150,000 toward salary and benefits, if any, will be the responsibility of the Faculty of Science. After five years, the Chair (if tenured) will assume the first available base-budgeted faculty position in the Department of Physics created through a retirement, resignation, or the allocation of a new base-budgeted position; however, until that time, the Faculty of Science will be responsible for using its discretionary budget to fund the tenured position.

2. Research Funding: $250,000 in Year #1.

Faculty of Science: $73,000

1. Start-up grant for the Chair: $25,000.

2. $16,000 per year, in each of Years #2, #3, and #4 to support one, or at most two, high-quality graduate student(s) under the direct supervision or co-supervision of the Chair.

Policy. The University of Regina Policy on Research Chairs (RCH-010-010) governs this Research Chair.

Reporting. The Fedoruk Chair in Nuclear Imaging shall submit an annual report to the Dean of Science, describing the activities in the previous 12 months of the Chair. Copies of this report shall be made available to the Vice President (Research), the Research Office, University Advancement and Communication, and the Sylvia Fedoruk Canadian Centre for Nuclear Innovation.

November 20, 2020
November 21, 2020

Dr Irfan Al-Anbagi, Chair
Council Committee on Research
University of Regina

Dear Dr Al-Anbagi,

Enclosed is a proposal for which I seek the approval of the Council Committee on Research: to change the research area of the Faculty of Science's current Tier 1 Canada Research Chair allocation from Water, Environment, and Sustainability to that of Computational Learning Theory.

Thank you for your consideration in this matter.

Sincerely,

[Signature]

Douglas Farenick
Dean, Faculty of Science

Cc: C. Butz, Associate Dean (Research) of Science
UNIVERSITY OF REGINA
Council Committee on Research

Proposal: Tier 1 Canada Research Chair in Computational Learning Theory

Submitted by: Douglas Farenick, Dean
Faculty of Science
University of Regina

Executive Summary:
In February 2019, the Faculty of Science was allocated a Tier 1 Canada Research Chair (CRC) in the area of Water, Environment, and Sustainability. A search targeted to candidates who identify as female was launched in March 2019. Although there were some unforeseen delays in completing the interviews, an outstanding candidate was recruited. On April 27, 2020, the candidate accepted a conditional offer of appointment (conditional on approval of the CRC Secretariat) at the rank of Professor and with tenure, effective July 1, 2021. However, on September 29, 2020, the candidate formally withdrew from further consideration for this Canada Research Chair. For reasons explained in additional detail below, I am seeking approval to move the research focus of the Tier 1 Canada Research Chair allocated to the Faculty of Science from Water, Environment, and Sustainability to that of Computational Learning Theory. My aim is to launch a search for the Tier 1 Canada Research Chair as early as possible in 2021, with the goal of submitting a nomination to the CRC Secretariat in April (preferably) or September (alternatively) of 2021.

Background:
To address the under representation of women in the sciences, a deliberate decision was made in 2019 to target the search for a Tier 1 Canada Research Chair in Water, Environment, and Sustainability to candidates who identify as female. Doing so resulted in a small but high-quality applicant pool, with the top two candidates being scientists currently working and living in the United States. (The applicants from Canada lacked the records of achievement that would make them competitive for a Tier 1 Canada Research Chair.) The challenge in preparing an offer to the top candidate that would match their current salary and research infrastructure was very significant. The University’s lack of a spousal hiring policy also worked against me and was, ultimately, one of the factors that resulted in the top candidate withdrawing herself from consideration in the Canada Research Chair competition. With a global pandemic upon us, I expect such challenges to persist or perhaps to be even greater if we were to relaunch the search now (or in the near future) in a field related to Water, Environment, and Sustainability.

Therefore, moving forward in a strategic manner, I propose to use the vacant Tier 1 Canada Research Chair for the purpose of retention rather than recruitment. I remain committed to appointing high-quality Tier 1 Canada Research Chairs in the Faculty of Science; and I am committed to addressing the under representation of members from designated groups in prominent scientific positions within the University of Regina. I believe it to be a strategic imperative for the Faculty of Science and the University of Regina to consider its own top scientists as nominees for Tier 1 Canada Research Chairs. Within the Faculty of Science there are individuals whose career achievements and research activity are at the level of Tier 1 Canada Research Chairs. It is from this pool that I aim to address equity and diversity within science-focused Tier 1 Canada Research Chairs.

Dr Peter Leavitt’s term as a Tier 1 Canada Research Chair in Environmental Change and Society will be completed in 2024. A strong case could be made to use Dr Leavitt’s vacated Chair to recruit
an external scientist to a Tier 1 Canada Research Chair in Water, Environment, and Sustainability. By then the negative impact of today’s global pandemic will possibly have diminished, making the climate for recruitment better than that of today.

**Proposal and Rationale:**
The proposal is for a Tier 1 Canada Research Chair in the field of Computational Learning Theory, effective July 1, 2022, and targeted to individuals who identify as female.

*The field of research.* Computational Learning Theory is a branch of theoretical computational science that deals with the development of algorithms that enable computers to infer/discover/learn patterns from sample data. This very active area of computational science has wide-ranging applications to a variety of fields—bioinformatics, health informatics, and finance, to name a few. In contrast to “big data” analysis, which involves randomly selected samples, computational learning theory addresses knowledge acquisition and decision making based on relatively small amounts of (carefully selected) data.

*Research environment and infrastructure.* With a focus on theoretical work, the infrastructure required by this area of research is within the capabilities of the Faculty of Science and the Canada Foundation for Innovation program to provide. Indeed, the Faculty of Science has in recent years reallocated some of its internal space assignments to enhance the current research work in machine learning and data analytics. Several faculty members at the University of Regina have expertise in the related areas of machine learning, data mining, deep learning, information visualisation, bioinformatics, graph theory, and combinatorics, which makes the opportunities for meaningful collaboration and research impact very strong. Indeed, in the Departments of Computer Science, Chemistry & Biochemistry, and Mathematics & Statistics there are several faculty members who are internationally-recognised researchers in these related areas.

*Potential of nominating a high-quality candidate.* The potential is very high. Dr Sandra Zilles, who currently holds a Tier 2 Canada Research Chair at the University of Regina until June 30, 2022, is expert in machine learning and computational learning theory. Dr Zilles is the leading researcher at the University of Regina in theoretical computer science; her record of scholarly achievement, her successes with granting agencies, and her external recognitions (e.g., College of New Scholars, Artists, and Scientists of the Royal Society of Canada) separate her from others at the national level. Lastly, in accordance with the policies of the Canada Research Chairs Program, “after an open and transparent recruitment process, institutions can advance a current Tier 2 chairholder to a Tier 1 Chair during the term of the Chair.”

*Potential impact of the Canada Research Chair allocation.* The most significant impact, beyond retaining Dr Zilles or recruiting a similarly high-level candidate, is the continuation for another 7 to 14 years of a 10-year research program that has been supported through the Canada Research Chairs program and the Faculty of Science. In this way we retain and enhance the value of our investments of the last ten years. The potential for the continued recruitment high-quality graduate students in machine learning, computational learning theory, and related fields to the University of Regina is substantial.

*Plan for Faculty of Science budget-line.* Assuming a candidate is in place for July 1, 2022, the two possible dates for placing the Tier 1 Canada Research Chair into a base-budgeted faculty position in Science are July 1, 2029, and July 1, 2034. Both scenarios provide ample lead time for position management by setting aside a vacancy, created through retirement or resignation, for the Chair upon the end of the Chair’s term.
Additional resources in support of the Tier 1 Canada Research Chair. If the Tier 1 CRC were awarded to Dr Sandra Zilles, then the Faculty of Science would commit to recruiting a tenure-track faculty member in a closely related field (e.g., Theoretical Foundations of Artificial Intelligence) to enhance the research activities of the Chair. The budget-line for this tenure-track faculty member would be the one I have reserved for Dr Zilles when she completes the second term of her Tier 2 Canada Research Chair on June 30, 2022.

Fit with the University of Regina Strategic Plan and Strategic Research Plan. Of the strategic priorities set out in the University of Regina’s Strategic Plan, All Our Relations, for 2020-2025, the activities of a Tier 1 Canada Research Chair in Computational Learning Theory will contribute to the strategic priority of Discovery. As with all research chairs in the Faculty of Science. The Tier 1 Canada Research Chair will be strongly encouraged to recruit young scholars and students with diverse backgrounds, including Saskatchewan indigenous students, to the Chair’s research teams and projects. The present proposal also aligns closely with the Digital Future thematic research priority, as identified in the University of Regina’s 2016-2021 Strategic Research Plan, peyak aski kikawinaw: Serving Through Research.

Equity, Diversity, and Inclusion. The Canada Research Chairs Program requires a commitment to equity, diversity, and inclusion. Specifically, “all institutions are expected to make concerted efforts to meet their equity and diversity targets, and provide a supportive and inclusive workplace.” The strategy proposed herein and recent leadership additions in the Faculty of Science will support this requirement of the Canada Research Chairs program.

Previous CCR Related Approvals:

Tier 1 Canada Research Chair in Water, Environment, and Sustainability — approved 01 Feb 2019

Policy:

The University of Regina Policy on Research Chairs (RCH-010-010) will govern this Research Chair, along with Article 14.6 of the 2017-2021 URFA Collective Agreement. Tri-Council policies related to the Canada Research Chair Program will also require compliance.

November 21, 2020