January 4, 2018

Professor Andrew Petter  
President and Vice-Chancellor  
Simon Fraser University  
Burnaby BC V5A 1S6

Dear President Petter and members of the Review Committee,

I would like to be considered for a second term as Vice-President, Research and International (VPRI) at Simon Fraser University. In this letter, I describe key accomplishments of the VPRI portfolio, under my leadership, since joining SFU in September 2014. I also look forward to the major goals of a second term, should my appointment be extended. At the outset, it is important for me to acknowledge that I have been privileged to work with an outstanding group of people, and that many of the accomplishments listed below are the result of our collective efforts. In addition, the success of the portfolio rests in large part on the remarkable accomplishments of SFU’s faculty members, students and postdoctoral fellows.

Continuing to Strengthen SFU’s Research Profile

A key focus of my work, since joining SFU, has been to strengthen the services and supports offered to researchers and to continue to grow the research enterprise. Over the past years, the profile of research at SFU has made significant gains as we further secure our position as a major research-intensive university in Canada. As is evident in the chart below, SFU’s research income reached 139 million dollars in 2017. This is particularly impressive given the challenging research funding environment in Canada.

Figure 1. Growth in SFU’s Research Income
Over the past three years, we have paid particular attention to institutional grants, ensuring that our applications are as competitive as possible. It is noteworthy that in the last CFI Innovation Fund competition, SFU achieved unprecedented success having had five projects funded for a total of 21.7 million dollars (See Figure 2).

**Figure 2. 2017 CFI Innovation Fund Results Depicting Total Value in Canadian Dollars and Number of Projects Funded**

There have been many successes over the past three years; I am particularly proud that SFU was awarded two Canada 150 Research Chairs. There were only 26 chairs awarded in Canada. This success demonstrates the ability of SFU’s research enterprise to rally and respond to stringent funding timelines, and affirms that SFU is positioned to attract top-tier internationally-based scholars and researchers.

**Creating a Strategic Research Plan to Guide Investment and Opportunities**

In 2016, we finalized and launched *a transformative strategic research plan* (SRP) that is both focused and strategic. The plan sets out an ambitious agenda for research in which key challenges are outlined. The SRP is being used to guide discussions and activities related to the development of multidisciplinary research teams and strategic research applications. A few examples are provided below:

**Challenge: Enhancing Our World through Technology**

- We have recently engaged in mapping our capacity in the area of augmented and virtual reality and are bringing these researchers together to discuss opportunities and how they can be realized.
- The CFI Funding Award, “Silicon Quantum Leap” (PI Professor Mike Thewalt; $7.6M) positions SFU to be a major player in the area of quantum computing by accelerating research and collaboration into a new, scalable quantum technology capable of revolutionizing computing.
Challenge: Addressing Environmental Concerns and Creating a Sustainable Future

- The Office of the VPRI financially supported a workshop in the area of sustainability and water to support SFU's capacity to provide leadership for the UN Decade of Water (Pacific Water Research Centre).
- The Office of the VPRI has committed to providing support for an NSERC CREATE proposal in Climate, Water and Health (PI Professor Kirsten Zickfeld).

As we move forward, the SRP is guiding discussions about funding for strategic Canada Research Chairs and future institutional applications. We have developed yearly operational plans to deliver on SRP objectives and are tracking our success through key performance indicators, as we continue to build research strengths in priority areas.

Fostering Organizational Excellence

Over the past three years, I have sought to strengthen the services and supports that we provide to SFU researchers. To meet this objective, I restructured the VPR Office to more effectively deliver on SFU’s research mission and be more service oriented. Several key hires for the Office were made including: Trevor Davis, Executive Director, Research Operations; Iain Begg, Director, Industry Engagement; and Gloria Ingram, Director of the Office of the VPR. These key individuals are working with me to enhance linkages between the VPR Office and units across the campus. Through these initiatives we have seen progress on several performance indicators, including the length of time for completion of ethics review and the timely announcement of funding opportunities.

Recently, Dugan O’Neil joined the team as the new Associate Vice-President, Research. In his role, he is seeking ways to strengthen the transparency of the work undertaken by the VPR Office; for example, he recently led a university-wide consultation on future CFI processes.

Fostering Opportunities for SFU’s Libraries

It is a great pleasure to have the Library report to the VPRI. We are privileged at SFU to have an outstanding Library system. During my tenure as VPRI, I have supported the further development of the Library, ensuring that its collections and serials budgets are protected and supporting new initiatives that keep the Library at the forefront of information access and knowledge mobilization. Key accomplishments include the development of an open innovation policy, the development of a new maker-space in the Bennet Library, a strengthened digital humanities hub, and recent recognition of the SFU Library through membership in the Association of Research Libraries, which is by invitation only and requires a systematic and thorough review.

Strengthening International Engagement

Within the first year of my tenure I was asked to assume responsibility for SFU’s International Office. In the past two years, we have strengthened our relationships with key partners in Asia, India, and Australia. The International Office continues to support the internationalization of research and education through strategic support and international engagement funding opportunities. These funds have provided a bridge to accelerate student and faculty exchanges. In addition, SFU was recently selected as the lead host for the Asia-Pacific Association of International Education Conference in 2020. This will be the first time that the conference is held outside of Asia or Australia, and will attract more than 2,000 participants from Asia Pacific, Europe and the Americas. The conference will provide the opportunity to feature SFU’s international engagement and further strengthen our global partnerships and engagement.
Leading University-Wide Strategic Initiatives

I have been involved in the development and launch of two university-wide initiatives: one focused on innovation and the other on big data.

SFU Innovates, is a university-wide strategy that seeks to strengthen SFU’s commitment to innovation and entrepreneurship. The strategy involves four pillars of activity: industry and community research partnerships, incubation and acceleration, entrepreneurship, and social innovation. The strategy has already realized a number of successes. For example, SFU underwent a rigorous process to be designated as British Columbia’s first Ashoka U Changemaker Campus. This global network of leading universities is committed to advancing social innovation and “change making.” From curriculum and research, to operations and community engagement, the network will set the bar for social innovation education and action. As a member, SFU will contribute to the growing body of work and best practices in social innovation education and research. Another success is SFU’s business accelerator VentureLabs®, a world-class technology business accelerator program and recognized as a top performer in job creation and capital formation in BC. SFU’s students are being increasingly recognized for their entrepreneurial and change making activities through competitions such as the Oxford Global Challenge and the Next36. Times Higher Education recently recognized SFU as one of the world’s top 55 Technology Challengers – universities that have innovation at the core of their strategic plans with strong industry links and excellent technology research.

KEY, SFU’s Big Data Initiative is focused on providing people with the training, expertise and infrastructure needed to examine complex data, generate new knowledge, and contribute to an innovative economy. This initiative builds on SFU’s impressive advanced research computing infrastructure, including our newly commissioned supercomputer Cedar, Canada’s most powerful academic supercomputer. The initiative seeks to grow data-intensive research across all eight faculties, crossing multiple disciplines, from the humanities, to health, to criminology, to communications.

Recognizing and Celebrating Research Success

SFU is privileged to have a cadre of outstanding researchers. In the past year, we have developed processes to intensify our efforts to ensure that SFU faculty are nominated for prestigious external awards. We now have dedicated staff focused on developing external award nominations and have established a President’s Advisory Committee on External Awards to ensure a rigorous process in vetting and supporting outstanding candidates. The effort is beginning to pay off. This past year, two SFU researchers were admitted to the Royal Society of Canada (Professors Nick Blomley and John Harriss) and Professor Nathalie Sinclair was admitted to the Royal Society of Canada, College of New Scholars, Artists and Scientists.

I have actively participated in many research conferences and events organized by SFU faculty members and participated in celebrations of funding announcements. The recognition of research excellence also extends to undergraduate students, graduate students and postdoctoral fellows. I have been privileged to participate in events such as the Three Minute Thesis and to provide seminars to postdoctoral and doctoral research trainees. The Office of the VPRI is committed to providing funds for undergraduate student research awards, and to recognize the achievements of undergraduate researchers, we are hosting an inaugural pan-university undergraduate student research day.

Contributions to University Welfare

In addition to the accomplishments listed above, I continue to look for ways to support the entire university mission. I have guest-lectured in classes, provided addresses to SFU conferences and research
days, presented to units such as Advancement and Alumni Engagement, and have participated in numerous university and external events. I currently represent SFU on several external boards and committees, including CDRD, Canada’s national Centre for Drug Research and Development, which has amassed partnerships with over 50 affiliated universities and research institutes, many health sciences SMEs/entrepreneurs, top global pharmaceutical companies, translational research centres, and patient-focused foundations; PICS; and Glyconet, a National Centre of Excellence focused on glycomics research. I have actively engaged with the Consular Corps of BC and many diaspora communities, looking for ways to strengthen our international relationships at home and abroad. I have presented on different aspects of SFU’s research activities to a variety of stakeholder communities including at Universities’ Canada Converge 2017 event, where I spoke about breaking down barriers and fostering a more inclusive Canada. I have played an active role in engaging other BC universities in discussions about innovation clusters and areas of strategic interest to SFU.

In the past three years, I have lent my support to engaging the provincial and federal governments on the topic of the importance of research. I have made several trips to Ottawa to discuss SFU’s research priorities with different branches of government and funding agencies and have met with members of the legislative assembly and other government officials to discuss opportunities for strengthening research and knowledge mobilization in BC.

Future Objectives

Notwithstanding the progress we have made in the research and international portfolio, there is much more we can do. Below I highlight major goals for my second term:

1. **CONTINUE TO OPERATIONALIZE THE STRATEGIC RESEARCH PLAN AND TRACK SUCCESS.**

   When I was embarking on developing the SRP I was asked about how we measured success in relation to the previous SRP. It was clear that we had not developed a process to monitor our performance in relation to the SRP and had not identified relevant metrics. This matter has now become a priority. Key to monitoring success is having appropriate data. We are embarking on the implementation of a new research reporting system that will assist in the tracking of research progress, including pre-award and post-award activity.

   We are carefully monitoring success in addressing the research challenges set out in the SRP and will continue to look for new instruments to encourage cross-faculty work in relation to these challenges. The plan sets out a number of ambitions related to recruiting outstanding faculty and students, and providing students with opportunities to participate in research. This work necessitates close collaboration with the Provost and the Dean of Graduate and Postdoctoral Studies. In 2020, when we begin work on the next SRP, I look forward to being able to share the progress we have made in relation to the 2016-2020 SRP.

2. **CONTINUE TO STRENGTHEN THE SUPPORT THE VPR PORTFOLIO PROVIDES TO THE SFU RESEARCH COMMUNITY**

   With the growth and complexity of the research enterprise, there is a concomitant need to further develop our services for researchers. If SFU researchers are to realize their aspirations to lead large national research initiatives, we need to develop processes to help to scale research initiatives. Services provided to the university community ideally undergo continuous quality improvement. There are a few areas that I have targeted for particular attention. We need to improve the processes we have in place to manage contracts, and to protect and commercialize intellectual property. We have identified the need to hire more staff to support research facilitation and services, and industry engagement. We need to streamline processes by developing templates and pathways to ensure that the research community can easily interact with the services available and get the most out of them. In addition, we need to continue
to work with colleagues in Research Accounting to ensure that the research community is provided with seamless support. On this latter point, I look forward to continuing to work closely with the Vice-President Finance and his team.

The Library recently underwent an external review. The review lauds the SFU library system for its extraordinary development and success and sets out some recommendations for further development. These recommendations provide a blueprint for continuing to strengthen the library system for the benefit of the SFU community.

3. **Strengthen the SFU International Portfolio**

Research is a global endeavor — increasingly, the success of our scholars rests on our ability to connect with others globally, to establish international teams, and to provide opportunities for faculty and student exchanges. With the imminent hiring of a new Executive Director, International, and the need to develop a refreshed international engagement strategy, we will seize the opportunity to reconsider how we facilitate internationalization across the university.

4. **Continue to Strengthen Strategic Initiatives at SFU**

The *Big Data Initiative* is well on its way to resounding success. In its first year it has focused internally on reaching out to the research community and developing a robust menu of programming and supports. In the next years we need to also engage externally to ensure that we find ways to harness big data to benefit communities and industry. A key priority will be to ensure that this initiative is sustainable. SFU Innovates has experienced significant success. Many units of the university are engaged in the work of change making and innovation. There is an opportunity to further strengthen the strategy by creating more synergies amongst players and activities. It is timely to take a step back to ensure there is a common vision for the strategy, one that resonates across the university. To this end, we are engaging stakeholders in critical conversations about innovation at SFU and will be developing a shared vision for our work together.

Since coming to SFU, I have committed to further strengthening our supports for community-engaged research. A key element of this strategic priority is to develop a suite of supports and services and to recognize, support, and celebrate this vital scholarship.

5. **Contribute to Strengthening the Research Ecosystem**

If we are to continue to build opportunities for researchers at SFU we need to find ways to strengthen research partnerships internally and externally. SFU has both established and emerging research strengths that span several departments, schools and faculties. Recognizing these strengths and fostering their growth is a key role for the VPRI. As an example, the federal government launched an innovation supercluster initiative in 2017 with nearly a billion dollars of federal funding. A strong BC proposal was developed related to digital technologies. This prompted me to map SFU’s expertise in augmented and virtual reality, revealing a strong cohort of researchers spanning many areas of SFU. Mapping strengths in this way will allow SFU to take advantage of emerging opportunities and to grow its areas of strategic strength.

To identify and further build areas of strength, we need to deeply engage faculty members in identifying emerging opportunities and mechanisms that will breakdown the silos that stand in the way of cross-disciplinary collaboration. This ambition can be realized by strengthening our consultation processes, providing more opportunities for faculty members to network, and enlisting faculty champions who have knowledge of substantive areas.
The research ecosystem will thrive by creating stronger regional partnerships. By working with other BC research-intensive universities, and across municipalities, we will play an important role in making British Columbia a recognized hub of research strength. In the current context, there is much to be gained by recognizing that through these partnerships we can collectively compete on a global scale.

6. CELEBRATE AND RAISE THE PROFILE OF RESEARCH AT SFU

There is much to celebrate when it comes to research and scholarly activity at SFU. Too often, our researchers’ successes do not receive the fulsome attention they deserve. In addition to continuing to nominate researchers for the most prestigious of awards, we need to develop more effective means to publicly celebrate and recognize these achievements and to make SFU research more visible to the SFU community and the external community in BC, Canada, and beyond.

Given SFU’s commitment to knowledge mobilization, we need to better support researchers as they explore new ways to share their research for maximal impact. To this end, we are in the midst of developing a strategy to support knowledge mobilization and to ensure that SFU researchers have access to a suite of channels to amplify their work, from social media, to the press, to policy channels, to graphic and representational channels, and to artistic expressions.

Conclusion

In conclusion, I have found it a pleasure and privilege to work at SFU for the past three and one half years. I am particularly grateful to the executive team who together have supported and strengthened the work of the research and international portfolio. I am enthusiastic about the future and look forward to the opportunities that lie ahead. SFU’s future is very bright, and I’d like to be part of it.

Yours Sincerely,

Joy Johnson, PhD, FCAHS
Vice-President, Research and International