Research Ethics Board Annual Report to the BCIT Board of Governors (2022)

Introduction

BCIT's Research Ethics Board (REB) operates under BCIT Policy 6500(1,2). All research projects involving human participants or human biological materials undertaken by members of the BCIT community fall within the jurisdiction of BCIT's REB. Projects conducted by researchers from outside the BCIT community who access Institute resources (equipment, facilities, personnel, or participants) also fall within the jurisdiction of BCIT's REB when those projects involve human participants or human biological materials. The REB reports directly to the Board of Governors and is administratively responsible to the Vice President, Academic.

In carrying out its responsibility to review and approve research projects, the REB ensures that research involving human participants under the auspices of BCIT is done with due regard for ethical principles. BCIT's REB adheres to the principles set out in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2)(4) which sets the national standards that are followed across Canada. REB members are aware that research done under the auspices of BCIT carries an implied liability, and must therefore meet the highest ethical standards.

Besides protecting the interests of human participants, REB review enables BCIT researchers to maintain their eligibility for national and international research funding. In addition, the REB contributes to education in research ethics for faculty, staff and students.



Applications submitted – historical data and projection for 2023

In 2022, BCIT's REB reviewed 38 applications. Historically, the REB has been experiencing a roughly twofold (100%) increase in the number of applications every 5 years. The two more dramatic changes can be observed in the chart and reflect the addition of student applications (clearly observed in the data from 2017) and the addition of new researchers from Providence Health, with an expected 45 additional applications (according to numbers provided by the Nursing department), starting in 2023 or early 2024. This is excellent news for BCIT's research and for the institution's impact and visibility in the province, but it also brings with it challenges in terms of funding of the REB, as will be explained further on in this report.

The projection in the chart for 2023 is based on the average number of applications in the last 5 years (2018-2022) with the added 45 applications. If the projection is realized, the number of applications for 2023 represents:

- 1. a 104% increase from 2020
- 2. a 300% increase from 2015
- 3. a 970% increase from 2010

Applicants seeking ethics approval completed a comprehensive application form₍₃₎ and submitted all relevant supporting documentation. The review process involves first determining whether the project was "minimal risk." To be deemed minimal risk, the project cannot expose the participants to greater harm than they would normally encounter in their daily lives. Projects that exceed minimal risk are reviewed by the full REB, whereas minimal risk projects where BCIT is the primary board are reviewed by a delegated review panel of two REB members. All 38 applications reviewed in 2022 were deemed to be of minimal risk by the chair in consultation with the board and other REBs. Student projects (16) were reviewed by the chair and open to the full REB for comments.

Following REB review, applicants were informed of any revisions required, once revisions were made, projects were approved for a period of one year. In 2022, in total, 36/38 (95%) of studies were approved. 29/38 (76%) of the applicants were from BCIT. BCIT applicants were members of faculty conducting research, students, faculty and staff working towards postgraduate degrees at other institutions, and researchers in Applied Research conducting contract research projects for external clients. The remaining 9 outside applications came from researchers completing graduate work at other institutions and others conducting research involving students or faculty as participants.

Faculty and student collaborative research in 2022 (harmonized studies) included 10 studies (26%) submitted through the Research Ethics BC platform hosted by UBC (RISe/PREP). Applicants had the opportunity to complete just a single online application for all relevant institutions, which was reviewed in parallel by the participating REBs—simplifying approval for REBs and researchers.

Faculty/staff submitted 22 studies (58% of total number of studies) and students submitted 16 (42%). The four student groups submitting studies this year were Environmental Health (9 studies; 56% of student research), Forensics (4 studies; 25% of student research), Prosthetics and Orthotics (2 studies; 13%), and Communications (1 study, 6%).

Other business

Several requests were received for information on REB applications, and there were meetings with prospective applicants when appropriate. 16 studies from the current year or previous years were renewed or amended.

New chair and transition process

On June 8th 2022, Allison Kirschenmann left her role as chair of the REB. Vasco Castela took over as chair on September 1st, due to a prior contract related to his teaching commitments. Board member Megan Murphy helped to fill in the gap serving as temporary Vice-Chair until the end of June, getting paid on an hourly basis. The board was then closed for the summer during July and August. REBC provided assistance during this long closure by monitoring the harmonized studies platform (RISe). Where BCIT review was required as the Board of Record, researchers were notified of the closure.

Chronic underfunding of the board

The trend toward growth of our research community has over the last few years had a profound impact on the board's ability to review applications thoroughly and in a timely manner, when considering the funding allocated to the chair position. So far the gap has been covered by the chair's paid and unpaid overtime, including not enjoying their vacation in full. It is worthy of note that the previous chair left the position due to burnout.

This chronic underfunding of BCIT's REB continues and is to become seriously aggravated in 2023-2024 and beyond. The current consequences are that application reviews are not getting the attention they deserve and our summer closures are twice as long as that of other boards. Future consequences may include occasional closures to avoid the accumulation of applications or extremely long turnaround times for reviews, which may make several studies unviable. This is in violation of TCPS2 2022 (article 6.2), which requires that "REBs are provided with necessary and sufficient ongoing financial and administrative resources to fulfill their duties")(5).

Here are five reasons why the current funding approach for the REB (no funding for an administrator) is problematic and inefficient:

- 1. Although the current course release for the chair (2 courses, equivalent to 2.8 hours/day) covers the work load of the chair on an average day if calculated on a yearly basis, peak work load is much higher, up to 6 or more hours a day for several days at a time. Since the chair's teaching obligations also have these peaks, this can mean 12-14-hour days. The REB's decisions require careful deliberation, and these peaks are incompatible with this goal.
- 2. The REB is BCIT's first line of defense against litigation considering that our researchers could break laws, and participants may sue. Often an ethical analysis goes above and beyond legal obligations, and can help minimize or prevent legal issues. It is cheaper to prevent rather than fix legal problems, and we can strive to reduce the extent of the ones that do occur by showing we've done due diligence in protecting participants. The possibility of medium and long-term reputation harm to BCIT should also be weighed.
- 3. It is financially unsound to pay a member of faculty to perform a number of relatively straightforward tasks, including answering emails and filing documents. Many of the chair's simpler tasks, including checking completion of applications, sending studies for delegated review and participating in the review of some applications should be performed by an ethics administrator with the appropriate analytical skills and training. The chair is willing to give up half/one course release to help to fund an administrator, if required. These funds will go farther (more hours paid) when paying an administrator.

- 4. It is problematic for the board to face a painful transition every time a new chair takes over. A new chair may take take 1-2 years to become fully efficient at performing some tasks, and at this time, being overworked, they may want to leave. An administrator would provide much needed continuity.
- 5. There is finally the matter of summer closures. Until recently, processing over the summer months has been relying on the previous chair, Allison Kirschenmann, offering to work during her vacation. Going forward, the current and future chairs will take their vacation in full as defined in their contract, but one consequence of this is that a two-month closure is excessive for an ethics board. Relying on unpaid members of the board to replace the chair over the summer is not a sustainable solution as it multiplies painful transitions.

Attempts to mitigate the consequences of the REB's chronic underfunding – a new method to process student applications

Following consultation with the board and the Environmental Health and Forensics departments, a new system using departmental pre-reviews was implemented to streamline student applications. The system is still being adjusted in coordination with the departments that are involved, but it has already been very successful.

Despite this new expedited system for student applications being at least twice as efficient as the previous system, the chair's workload during these peak times still amounts to 200% or more of the chair's paid time for board-related duties (as detailed above), making the current approach to funding the REB unsustainable. Further efficiency gains are not expected. The new system's speed has a cost, as it relies on the chair reviewing all student applications himself, the only second opinion being that of an inexperienced student supervisor. If mistakes occur, this could prove costly for the institution.

More details will be provided in the 2023 annual report, as the new system, implemented in 2022, primarily relates to 2023 applications.

Reviewing REB Policy and Procedures

Application, informed consent, member guides, and policy are reviewed and updated on a regular basis. The BCIT REB website was updated in collaboration with Joe Boyd in Applied Research.⁽³⁾ REB member Meena Amlani volunteered to create an REB application course on Learning Hub to walk students and faculty/staff through the process, adding to the suite of REB portals. This course is now complete and available.

Continuing education

To keep the board's knowledge of privacy and research ethics current, one or more board members are given the opportunity to attend national or regional ethics meetings and report back to the board. This year, one member attended the Canadian Association of Research Ethics Boards (CAREB) meeting virtually.

REB Membership

The members of the REB at the close of 2022 were: Meena Amlani (Faculty, Medical Radiography Technology), Michael Bourke (Member knowledgeable in ethics; Program Head, Liberal Studies),

Roger Gale (Instructor, Computer Information Systems Administration), Yvette Jones (Project Leader, Applied Research MAKE+), Allison Kirschenmann (Instructor, Basic Health Sciences), Jacob McPhail (Student member, Software Developer, Computer Systems), Shiva Mostafavi (Senior Analyst, Institutional Research and Planning), Megan Murphy (Member knowledgeable in law; Faculty, Basic Health Sciences), Robert Paquin (Faculty, Nursing), Borna Noureddin (Faculty, Computer Systems & Network Fundamentals), Hal Weinberg, OBC (Community member). The board is supported by Jenna Clews, ARLO-Administrative Assistant Liaison Office/REB administrator and Joe Boyd, Research Liaison, Applied Research Liaison Office, who updates our website on the Applied Research pages. The REB meets regularly every second month. Minutes of the meetings are kept.

Summary

BCIT's research community is small but is thriving and growing. The REB needs additional funding to support this growth as it's currently unable to fulfill its duties in full. A more detailed argument is being prepared and will be made available to the Board of Governors during the summer of 2023.

Signed

Vasco Castela BCIT REB Chair

References

- (1) <u>http://www.bcit.ca/files/pdf/policies/6500.pdf</u>
- (2) https://www.bcit.ca/files/pdf/policies/6500_pr1.pdf
- (3) <u>https://www.bcit.ca/applied-research/research-support/research-ethics/</u>
- (4) <u>http://www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/Default/</u>
- (5) https://ethics.gc.ca/eng/tcps2-eptc2_2022_chapter6-chapitre6.html