

ETHICS & ELEMENTS

BC CANCER RESEARCH ETHICS

HAPPY NEW YEAR FROM RESEARCH ETHICS! HERE ARE SOME UPDATES ABOUT US:)

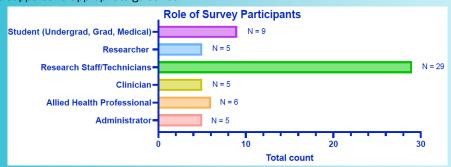
We would like to wish everyone a Happy and Prosperous New Year ahead.

New Officer has joined! — We are very pleased to introduce our new Research Ethics Officer, Jess Morrice! Jess is trained as a research scientist after completing her PhD in neurodegeneration at UBC. She loves creative problem solving and reading about all the exciting research being done at BC Cancer. When she's not working, you can find Jess exploring the great outdoors with her enthusiastic rescue pup!

Full Board Submission Deadlines available — The deadline dates are now available on our website. On a monthly basis, the REB members gather to review new and ongoing full board submissions and to discuss recognized ethical considerations from diverse perspectives. Please ensure that the initial applications are submitted at least three working days prior to the deadline to allow for departmental approval and for confirmation of fee payment. These deadlines do not apply to minimal risk projects which are processed by delegated review on a daily basis.

ETHICS EDUCATION NEEDS SURVEY—THE RESULTS ARE IN!

Last year from September to November, we conducted an Ethics Education Needs survey to gather researchers' and research staff's thoughts, experiences, and opinions on available ethics educational tools and resources. A diverse group of BC Cancer research teams participated—thank you!! We plan to analyze these collected responses from the 59 participants to identify existing gaps in order for our team to better provide support and appropriate guidance.



This project has not only focused on gathering the responses, but has also been a valuable learning experience for our team on how best to approach research teams to collect workable and meaningful data. We have a plenty of follow-up questions after reading your responses and may need to design additional follow-up surveys! You can expect to hear from us again to get additional information and ideas on how best to support the research groups at BC Cancer. Stay tuned!

And the winner is...

We are pleased to announce the winner of the prize draw, **Sylvia Lam!** Sylvia is a research assistant in the Department of Integrative Oncology at the BCCRC. Her role in the department varies depending on what her boss, Dr. Calum MacAulay, is working on, and research ethics is only a part of what she does. Sylvia has been involved in patient recruitment, consenting, developing the study protocol and data extraction from charts/CAIS, so she has found it a continuous learning experience. With new Pls and projects coming up, she's excited to see where she can fit in and help.

Congratulations Sylvia and thank you for all your hard work!

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AI IN RESEARCH

Food for Thought: Ethical Implications of Artificial Intelligence and Machine Learning in Health Research



As technology continues to advance, the applications of artificial intelligence (AI) and machine learning (ML) to biomedical research are expanding. This is reflected in the exciting research being done here at BC Cancer. Recently, we have been welcoming an increasing number of research ethics applications which include the use of AI or ML techniques. The ability of these techniques to recognize patterns in large and complex datasets poses a potential to revolutionize healthcare through applications such as disease prediction, higher accuracy diagnostics and precision treatment.

https://hpluspedia.org/images/a/ab/AlSafety_teaching_comic.jpg

This potential to advance health care reveals exciting new directions in biomedical research and poses vast and complex ethical concerns. Therefore, it is important to approach this evolving area with consideration and caution. While developing Al/ML algorithms using health data, it is critical to consider all aspects of how they are being developed and applied to the research project. The intent of research is to create positive health outcomes, yet we must be mindful to address key ethical aspects, such as patient privacy, public trust, data security and the integrity, accountability and responsible conduct of research. In the research process, we must cognizant not create harm or exacerbate existing social inequalities in the healthcare system, such as unequal opportunities or discrimination based on race or socioeconomic class. Ongoing evaluation of these algorithms is needed to ensure their generalizability, avoid potential bias in the data and to maintain focus on their clinical relevance and application to withstand rigorous evaluation and ultimately lead to positive health outcomes in our field.

We look forward to facilitating the important contributions that BC Cancer will make in Al/ML research and hold cautious optimism that these techniques will lead to better care for our patients!

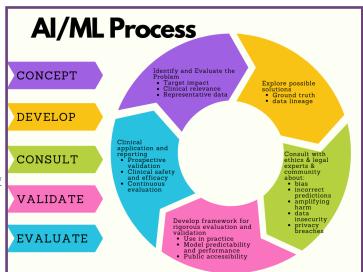
We welcome any Al/ML ethics-related inquiries at REB@bccancer.bc.ca

For further reading, see:

Wiens, J. et al. Do no harm: a roadmap for responsible machine learning for health care. Nat Med 25, 1337–1340 (2019). https://doi.org/10.1038/s41591-019-0548-6

Murphy, K. et al. Artificial intelligence for good health: a scoping review of the ethics literature. BMC Med Ethics 22, 14 (2021). https://doi.org/10.1186/s12910-021-00577-8

McCradden MD, et al. A Research Ethics Framework for the Clinical Translation of Healthcare Machine Learning, The American Journal of Bioethics, 22:5, 8-22 (2022). DOI: 10.1080/15265161.2021.2013977



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Now Available: TCPS 2 (2022)

The Canada's research funding agencies (CIHR, NSERC, and SSHRC) released the publication of the <u>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – TCPS 2 (2022)</u> on January 11, 2023 which replaces TCPS 2 (2018). The TCPS 2 serves as the official human research ethics policy of the three agencies. We highly recommend those who conduct research involving humans (human information and/or biological materials) to review the following added guidance:

- ⇒ Chapters 3 & 12: Broad consent for storage of data and human biological materials for future unspecified research
- ⇒ Chapter 8: Streamlining multi-jurisdictional research ethics review of minimal risk research
- ⇒ Chapter 12: Research involving totipotent stem cells
- ⇒ Chapter 12: Review of research involving **human cell lines**



JOB ALERT!

The Research Ethics Office is hiring a permanent FT Officer!

Do you like working in a small team, sharing your views, listening to others, consulting and delivering projects?

Our mission is to facilitate the research ethics review process at BC Cancer through engagement, consultation and education.

Curious to know more? Contact our Director, Jessica at

jessica.gagliardi@bccancer.bc.ca or apply here!

IN-COMING AND OUT-GOING REB MEMBERS

WELCOME!

Please join us in welcoming Dr. Jack Zheng to the Research Ethics Board as a scientific reviewer.

Dr. Zheng is a Radiation Oncologist at BC Cancer—Abbotsford specializing in genitourinary and gynecological brachytherapy. We very much look forward to working with Dr. Zheng. Welcome aboard!





QUESTIONS? CONTACT US!!

We are working a hybrid WFH/in-Office model.

Email us to set up a meeting!

reb@bccancer.bc.ca