Supporting Evidence for Alleged Mismanagement of Public Funds at Canada's Funding Agencies

Every year, the government gives out billions of taxpayer dollars to university academics to conduct scientific research.

The justification for this immense expense is that such research will be of value to society, whether to develop better medical treatments or social programs or produce new tech innovations, create jobs, boost the economy, etc.

For example, the MISSION of Canada's medical research funding agency (CIHR) is:
"...to create new scientific knowledge and to enable its translation into improved health, more effective health services and products, and a strengthened Canadian health care system."
[overlay: screenshot from CIHR's About us page: https://cihr-irsc.gc.ca/e/37792.html]

Unfortunately, however, it appears that various kinds of **mismanagement** is occurring at ALL 3 of Canada's funding agencies, which is impeding their ability to fulfill their respective missions.

We're talking about LOTS of money. Annually, Canada's 3 funding agencies spend about $2.3B on research grants (over $1B spent annually by CIHR alone), in addition to >$100M yearly to operate the 3 agencies (~$62M yearly operational expenses by CIHR alone, based on CIHR's own numbers).

We will present evidence that the funding agencies have MISMANAGED the RESEARCH they've FUNDED, but also that they've MISMANAGED how grant proposals were SELECTED for funding.

In the first category, we will present evidence that for FUNDED RESEARCH, they

1.1. Have NOT ensured that the funded research meets basic scientific standards like transparency , and that (*MOST SERIOUS form of MISMANAGEMENT*)
1.2. They've been overly soft on fraud in the way they investigate fraud

In the second category, we put forth evidence that funding agencies have MISMANAGED the **EVALUATION and SELECTION of grant proposals, including**

1.3. That they're using INSUFFICIENTLY TRANSPARENT grant review procedures, that
1.4. Tri-councils have neglected their basic duties, like selecting grants without returning peer reviews, unprofessional/incompetent reviewers, and being late on their own funding decision deadlines, and that
1.5. They've allowed political and ideological values to unduly bias grant EVALUATION and SELECTION

But first, a brief note on how research grants are awarded by funding agencies.

Supporting Evidence for Mismanagement video: https://www.youtube.com/watch?v=-g6ACC6M4uE (Dr. Etienne P LeBel)

First, researchers submit grant proposals to the funding agencies that describe what research will be done & why it's important and unique.

The agency selects 3-4 other researchers to EVALUATE each proposal, researchers who are supposed to have the relevant knowledge and expertise to assess the merit of the proposed research.

The reviewers are supposed to read the proposals, which are typically between 5 to 15 pages long, and then score each proposal in terms of its promise, quality, rigor, and the expertise of the team that would carry out the research, if it was funded.

1. **First, tri-councils have mismanaged FUNDED RESEARCH in various ways:**
   - 1.1. **Have NOT ensured that funded research meets basic scientific standards, including OPEN ACCESS and BASIC TRANSPARENCY:**
     - 1.1.1. **OPEN ACCESS**: Tri-councils have NOT ensured that the funded research is actually publicly accessible to the scientific community and the general public. Tri-councils "require" open access, but they don't check compliance/use a compliance system (see 5. "Compliance with the policy") nor do they do any audits (& we know from meta-scientific evidence that open-access compliance is fairly poor, e.g. ~<40%, Hardwicke et al., 2019).

       And, indeed, we're way behind several European countries, including the Netherlands, France, and Belgium, who have successfully implemented **open-access LAWS,** since 2015, that mandate public open access of all publicly funded research!

     - 1.1.2. **BASIC TRANSPARENCY**: Second, tri-councils ALSO have NOT ensured that funded research meets basic transparency like DATA SHARING and disclosing conflicts of interest and funding sources.

       Though again they do recommend these things (see tricouncil's "Responsible Conduct of Research Framework"), but because they don't check, most researchers don't comply.

       This means that *the research they've funded is mostly not useful*, because there's typically not enough information to (1) independently verify the correctness of the research, or (2) efficiently build upon or re-use the research.

       And indeed, we now know that most findings from published academic papers cannot be independently reproduced or replicated.
       [overlay: a few articles with titles to this effect]

       But they've talked about it for years, even decades, but this is mostly BIG-TALK-no-action or empty promises.

For example, they've stalled for years on data sharing mandates for funded research (e.g., Tri-Agency Statement of Principles on Digital Data Management (2016), which they've been working on since the 1990s (e.g. SSHRC's Research Data Archiving Policy (1990))

More recently, they indefinitely "postponed" data management/data sharing policy, unreasonably blaming COVID-19.

Even worse, after we pointed out the illogicality of postponing *RATHER* than prioritizing data sharing policy given the realities of COVID-19, we were repeatedly ignored.

[overlay: their Tweet, my pushback, and their disappointing non-response]

1.1.3. **DISCOVERABILITY**: Worse, tri-councils STILL don't have a centralized platform/website for Canadians to search and discover funded research. PMC Canada briefly hosted a subset of CIHR-funded publications (as part of US-based PMC), but this was decommissioned in 2018. These publications were moved to

a CIHR Research 2009–2017 Collection, but this was somehow also eventually decommissioned (web archive; see also here)

- This again places Canada behind other jurisdictions, e.g., European Union/European Commission, which publicly list resulting publications from grants, with corresponding open access links (e.g., our very own latest grant, click on "Results"; though admittedly their web platform is fairly limited, but it's a good start.)

[overlay: CIHR grants database, showing how one can see the grant titles/amounts, but does NOT show resulting peer-reviewed scientific articles, & also doesn't provide links to the open-access or public/open data of resulting published articles.]

1.2. **Too soft on fraud/fraud investigations**: Names of agency-funded researchers convicted of scientific fraud are kept private "due to privacy laws".

For instance, the names of Canadian-funded researchers convicted of scientific fraud are kept PRIVATE "due to privacy laws".

This means that convicted research fraudsters can typically carry on with impunity by continuing with their industry-sponsored projects at private companies or by getting research jobs in other countries.

Indeed, this is so bad that Canadian professor Amir Attaran has gone as far as saying that Canada might be the best place in the world to be a research fraudster!

[overlay: news article: "Canada's a great place to be a research fraudster"]

Such an opaque and secretive fraud investigation approach is embarrassing, and is also discrepant from what's done in other countries, for example, the much stronger and more transparent "name and shame" approach used by the US Office of Research Integrity, and in the Netherlands.

2. **A second kind of MISMANAGEMENT by the tri-councils concerns the EVALUATION and SELECTION of grant proposals, which have been mismanaged in 3 ways**:

2.1. **Opaque grant review: Insufficient transparency in how grant proposals are peer-reviewed, evaluated/scored, and selected** (hence low levels of accountability):

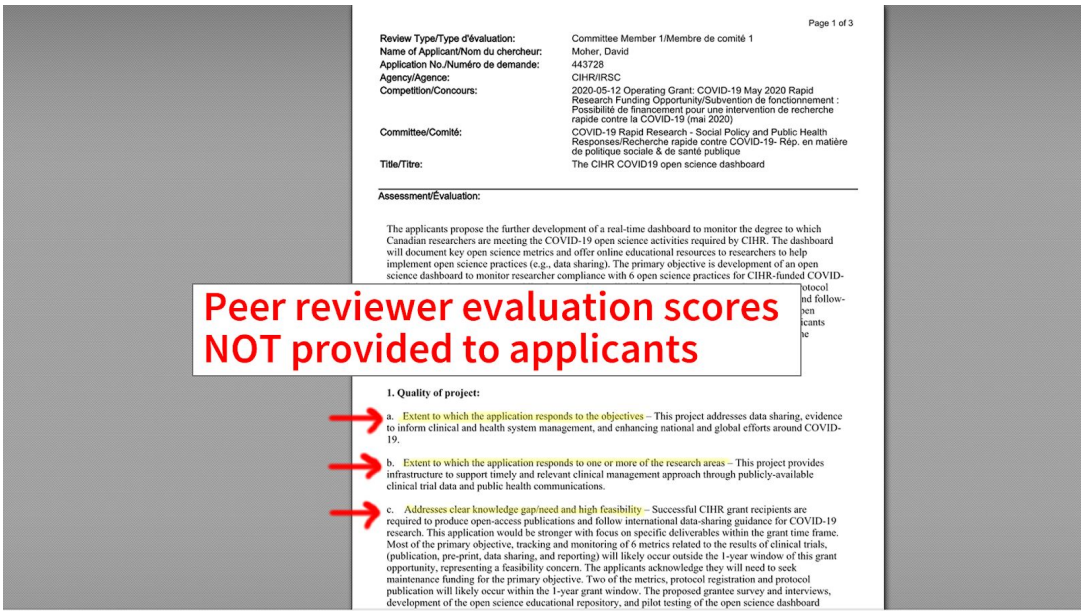
2.1.1. For example, the names of peer reviewers are kept secret and the actual content of the peer reviews are also not publicly released.

This leads to poor quality reviews, and it also means that reviewer biases and other conflicts of interests cannot be detected.

2.1.2. Their process is also opaque given that NO reviewer-level evaluation scores are provided to grant applicants.

This means it's impossible to independently verify that reviewer scores were aggregated correctly and that grant proposals were correctly ranked with respect to the funding thresholds.

[overlay: CIHR grant reviews example]



This OPAQUENESS means that the agency is not accountable to ERRORS made.

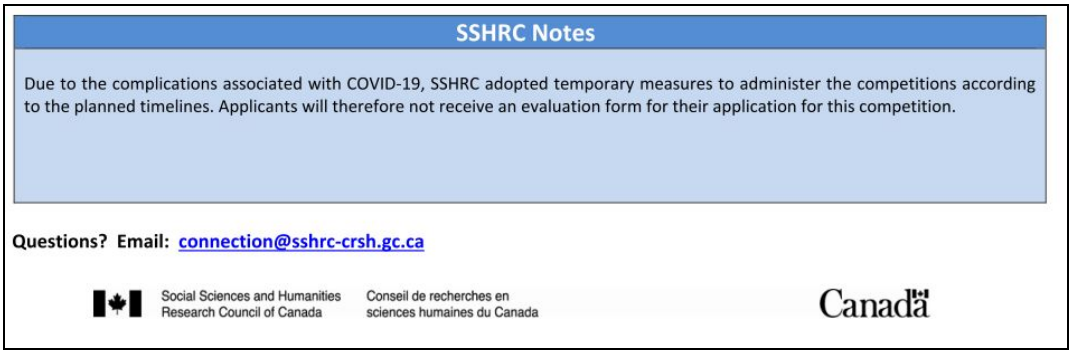
We know errors WILL BE MADE because grant reviewers are (1) human, (2) NOT PAID, & (3) are extremely busy people, so have very little time to carefully read proposals, score them, and provide feedback.

This insufficient transparency also means various political/ideological biases could be unduly influencing the grant review process, which as we review below, actually appears to be happening.

2.2. **Second, tri-councils have neglected, and in some cases, not fulfilled their basic duties:**

2.2.1. For example, grants have been selected *without* peer reviews returned: For some grants calls, peer reviews *were not even provided to applicants*, unreasonably blaming COVID-19 again (see screenshot below; actual notice of decision letter).

In fact, it's unclear if reviews were even completed or whether reviews were completed but just not compiled or shared with the grant applicants.



SSHRC Notes

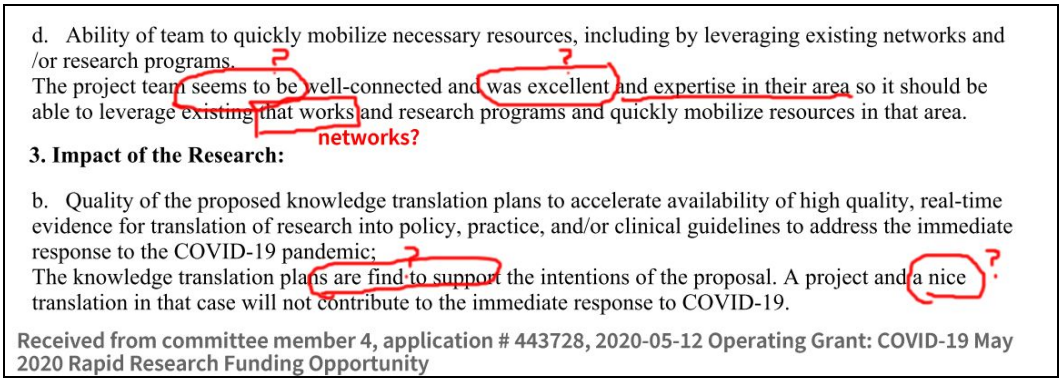
Due to the complications associated with COVID-19, SSHRC adopted temporary measures to administer the competitions according to the planned timelines. Applicants will therefore not receive an evaluation form for their application for this competition.

Questions? Email: connection@sshrc-crsh.gc.ca

Social Sciences and Humanities Research Council of Canada | Conseil de recherches en sciences humaines du Canada | Canada

2.2.2. They've also allowed unprofessional and/or incompetent reviewers, including sloppy peer reviews filled with incomprehensible sentences and typos.

[overlay: Egregious CIHR grant reviews e.gs., brief reviews, incomprehensible sentences, typos, etc; link to actual peer reviews, see reviewer 4.]



d. Ability of team to quickly mobilize necessary resources, including by leveraging existing networks and /or research programs.
The project team seems to be well-connected and was excellent and expertise in their area so it should be able to leverage existing that works and research programs and quickly mobilize resources in that area.

networks?

3. Impact of the Research:

b. Quality of the proposed knowledge translation plans to accelerate availability of high quality, real-time evidence for translation of research into policy, practice, and/or clinical guidelines to address the immediate response to the COVID-19 pandemic;
The knowledge translation plans are find to support the intentions of the proposal. A project and a nice translation in that case will not contribute to the immediate response to COVID-19.

Received from committee member 4, application # 443728, 2020-05-12 Operating Grant: COVID-19 May 2020 Rapid Research Funding Opportunity

And worse, in one case, when applicants reported an incompetent reviewer to CIHR, the agency responded by saying the only thing they could do is to exclude that reviewer in future submissions, which is illogical and completely unacceptable.

2.2.3. Tri-councils have often been late (by weeks) on their own grant funding decision deadlines.

[overlay SSHRC connection grant late by 2 week]

SSHRC makes Connection Grant funding decisions through a merit review process during four funding cycles per year, according to the following schedule:

Deadline	Decision Date
November 1, 8:00 p.m. (eastern)	January 8
February 1, 8:00 p.m. (eastern)	March 31
May 1, 8:00 p.m. (eastern)	June 30
August 1, 8:00 p.m. (eastern)	September 30

From: Francine Payant
Sent: July-13-20 8:32 AM
To: David Moher <dmohe2@uottawa.ca>; Jocelyn Côté <jcote@uottawa.ca>; Gillian Lord <glord@uottawa.ca>; Charis Putinski <cputinsk@uottawa.ca>
Subject: Moher - (SSHRC) Social Sciences and Humanities Research Council of Canada - Decision

2020-07-13

RE Number: 154975

Reference : Agency Reference Number 611-2020-0051 Type : Grant

2.3. **And finally, tri-councils have allowed political and ideological values to unduly bias grant EVALUATION and SELECTION in several ways,** hence, money is NOT going to the most promising or impactful research:

2.3.1. For example, all 3 tri-councils **require applicants to include what's called "Equity, Diversity, & Inclusion (EDI)" pledges**, wherein applicants must demonstrate what they've done to promote EDI principles **AND** what they'll do, if they win the grant, to further promote these EDI principles (including even NSERC, which funds natural sciences, engineering, mathematics, etc.).

NSERC CRSNG

Guide for Applicants: Considering equity, diversity and inclusion in your application

The Evidence is clear. Equity, diversity, and inclusion strengthen the scientific and engineering communities and the quality, social relevance and impact of research.[i] Increasing diversity and gender equity in the research enterprise are key priorities for NSERC[ii] and for the Government of Canada.

This commitment is acted upon primarily through NSERC's Framework on Equity, Diversity and Inclusion.[iii] The actions in this Framework implement a Tri-Agency response to the 2012 Council of Canadian Academies report on *Strengthening Canada's Research Capacity: the Gender Dimension.* The actions also implement NSERC's 2015 commitment to the Status of Women Canada Departmental Action Plan on Gender-based Analysis.

This Guide for Applicants document provides applicants with resources regarding what equity, diversity and inclusion mean in natural sciences and engineering research teams and research design and how their incorporation contributes to research excellence.[iv]

And this problem appears to go even deeper, in relation to what Dr. Gad Saad calls the "indigenization" of Canadian research, whereby researchers are forced to consider "tribal ancestral knowledge" as equal in merit to science, even though such "traditional knowledge" violates essential principles of the scientific method.

2.3.2. **Politically-biased grant evaluation criteria**:

A grant proposal is judged as being "high quality" only if it is consistent with politically "progressive" ideologies, even if a researcher personally disagrees with such values.

- Example from SSHRC 2020 Exploration Grants "merit" criteria for Review Process (New Frontiers in Research Fund)

Criterion: Equity, Diversity and Inclusion

To meet the NFRF program's expectations for equity, diversity and inclusion (EDI), projects must pass each of the following elements.

-	✓ Pass	✗ Fail
Analysis of context	Shows understanding of EDI considerations / systemic barriers in the context of the research team. Concrete and specific examples are cited in analysis. Demonstrates a strong commitment to EDI overall.	Analysis of context is generic and/or does not point to one or more systemic barriers. Evidence of commitment to EDI overall is lacking.
Concrete practice for each area	Lists at least one concrete practice that targets the specific context listed for each area.	A concrete practice is not listed for one or more of the areas, or the concrete practices listed are not related to the context that was described.
Implementation	Provides a description of how the concrete practice has been/will be realistically implemented.	Provides no or an unclear description of how the concrete practice will be implemented. The implementation plan is unrealistic.
Impact	Explains how the concrete practice will impact EDI, and how it will be measured.	Gives no indication of how the impact will be measured. Does not explain the anticipated impact of the concrete practice on EDI, or how it will be measured.

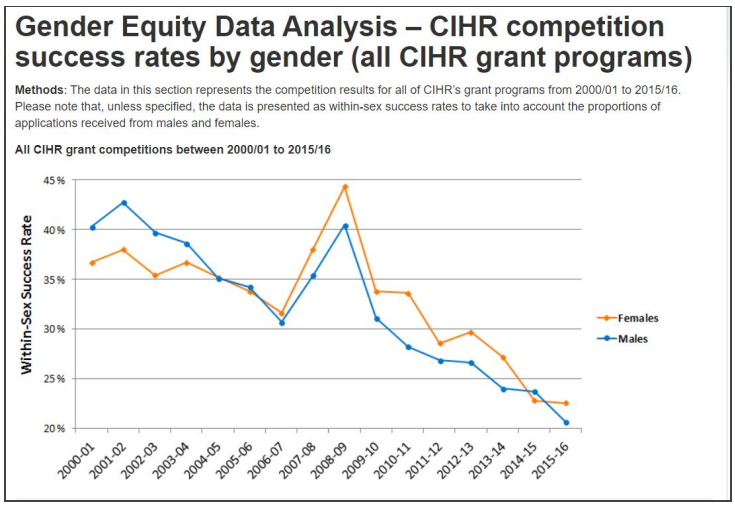
- Example from the CIHR COVID-19 May 2020 grant call, reviewers were instructed to score the "quality" of projects by considering the extent to which group-based identities like sexual orientation and religion were considered IN ALL STAGES of the proposed research.

"Quality and appropriateness of the sex- and gender-based analysis+ (SGBA+). SGBA+ refers to the consideration and examination of sex, gender and other identity factors (e.g., age, race, ethnicity, culture, religion, geography, education, disability, income and sexual orientation) at all stages of the research process including planning and implementation of the research project and related activities – please visit How to integrate sex and gender into research and Why Sex and Gender Need to be Considered in COVID-19 Research for additional information."

Of course, group-based identities sometimes should be considered in research, for example, when examining medical treatment efficacy, but these considerations should be kept completely distinct from assessing the *quality and rigor* of a grant proposal.

2.3.3. **A final problem is that funding decisions are made by equalizing across the group-based identities** of the grant applicants.

[overlay: Gender equity in CIHR funded research projects (data for other group-based identities; also equity across Indigenous and French groups, see CIHR COVID19 grant rejection letter; see also EDI in the Research System webpage)



This means, for example, that if 5% of grant proposals were submitted by francophone researchers, then 5% of research SELECTED for funding MUST go to francophone researchers.

Does it really make sense to decide what health research or drug trials to fund based on immutable group-based characteristics of researchers? Like the color of their skin, or their genitalia?

Of course not. And as eloquently said by Dr. Gad Saad (00:07:56), "There's no greater cancer to individual dignity than giving a grant to someone based on their tribal identity (are you a transgendered person or POC) rather than their individual merit as a scientist. It's grotesque."

By equalizing grant funding decisions across groups, we may be unknowingly funding less promising research by less qualified researchers, depending on the average quality of proposals across all of the different possible groups.

(Never mind the illogicality and futility of this approach given the innumerable number of intersectional groups that exist.)

Independent of this, values related to group equity in outcomes are part of a so-called "progressive" political ideology, which many Canadians disagree with in favor of *individual meritocracy*.

So this is particularly egregious given that government granting agencies and the public servants who work there are supposed to be politically NEUTRAL.

In any event, it is self-evident that the evaluation of the quality or rigor of a research project should **NOT** be based on political values, but in fact, at all 3 funding agencies, grant review procedures appear to allow, and in some sense **encourage,** politically-based biases.

Strengthening our case is the United States' Executive Order on Combating Race and Sex Stereotyping in the federal government, which explicitly prohibits any government agency or federal contractor to use race- or sex-based stereotyping in hiring or training. The order also prohibits the use of any "divisive" concepts like "white guilt" or "white privilege", which by dividing individuals along immutable group-based characteristics, promotes emotional tribalism, and impedes individual meritocracy.

Summary

In summary, it would appear that various kinds of mismanagement ARE IN FACT happening at each of Canada's funding agencies, which impedes their ability to achieve their respective missions.

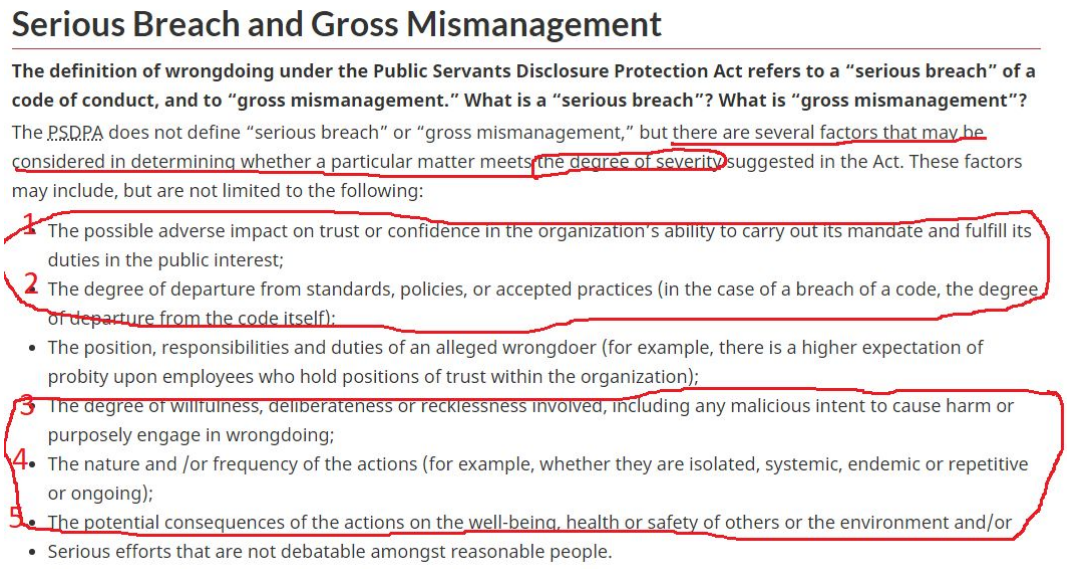
For CIHR, this hampers their mission of c*reating new scientific knowledge and improving the health of Canadians.*

Tri-councils have mismanaged FUNDED RESEARCH by failing to ensure it meets basic scientific standards like TRANSPARENCY and by being overly soft on convicted research fraudsters.

It has mismanaged the EVALUATION and SELECTION of grant proposals by employing INSUFFICIENTLY TRANSPARENT grant review processes, allowing political and ideological values to bias grant selection, and have neglected other basic duties.

In fact, these wrongdoings are so egregious that it appears they might even meet the degree of severity to be considered a "serious breach" or "gross mismanagement" under the *Public Servants Disclosure Protection Act*.

[overlay: screenshot of 5 of 7 factors considered in deciding whether a matter is severe enough to be considered "gross mismanagement", source]



Serious Breach and Gross Mismanagement

The definition of wrongdoing under the Public Servants Disclosure Protection Act refers to a "serious breach" of a code of conduct, and to "gross mismanagement." What is a "serious breach"? What is "gross mismanagement"?

The PSDPA does not define "serious breach" or "gross mismanagement," but there are several factors that may be considered in determining whether a particular matter meets the degree of severity suggested in the Act. These factors may include, but are not limited to the following:

1. The possible adverse impact on trust or confidence in the organization's ability to carry out its mandate and fulfill its duties in the public interest;
2. The degree of departure from standards, policies, or accepted practices (in the case of a breach of a code, the degree of departure from the code itself);
- The position, responsibilities and duties of an alleged wrongdoer (for example, there is a higher expectation of probity upon employees who hold positions of trust within the organization);
3. The degree of willfulness, deliberateness or recklessness involved, including any malicious intent to cause harm or purposely engage in wrongdoing;
4. The nature and /or frequency of the actions (for example, whether they are isolated, systemic, endemic or repetitive or ongoing);
5. The potential consequences of the actions on the well-being, health or safety of others or the environment and/or
- Serious efforts that are not debatable amongst reasonable people.

And this mismanagement represents a lot more than just billions of dollars of wasted public money. We've potentially missed out on LIFE-CHANGING scientific discoveries and breakthroughs, which could have prevented the deaths and suffering of millions of Canadians.

We have emailed 17 senior executives at the 3 funding agencies to make them aware of our evidence of mismanagement, but have not yet received any substantive response, except a vague "we're looking into your request" from a CIHR media relations person, and it's now been more than 2 weeks.

We've formally submitted a disclosure (see here) to the Office of the Public Sector Integrity Commissioner of Canada that summarizes our grounds and evidence of alleged gross mismanagement of public funds at the tri-councils.

We'll keep you informed with any updates in a follow-up video.

Recommendations to Tricouncils

The following are 5 concrete actions Canada's funding agencies could take to address the problems identified, to ensure the integrity and value of Canadian-funded research:

1. Following several European countries, instruct all Canadian universities to **immediately CANCEL all journal subscriptions** to exploitative for-profit publishers who block access to publicly-funded research and charge exorbitant fees for the researchers and public to access. This will save Canadian taxpayers more than ~$300M every year.

2. **Increase the transparency of grant evaluation/selection procedures** (e.g., by adopting Curate Science's grant review transparency standards).

3. **Increase the transparency of fraud investigation procedures** (e.g., by publishing a public list of names of all convicted fraudsters).

4. **Conduct random audits** to check that all published articles resulting from publicly-funded research meet basic scientific standards (e.g., by adopting Curate Science's minimum transparency standard).

5. **Depoliticize funding agencies** by, for example, eliminating any and all divisive, group-based approaches to grant evaluation and selection.