

OVID-19 has had a major impact on everyone. As many readers know, the impact of COVID-19 on the research community has been profound – access to research resources, including space and money has been greatly restricted. Researchers, on one hand, are those individuals who should be able to help us deal with the pandemic, and on the other hand have struggled to keep their labs running. While COVID-19 has made it more evident, this conflict of interest is present all the time; researchers decide where valuable research funding should go, and researchers need money in order to perform their own research. The purpose of this article is to remind researchers to be aware always of how their research might be helpful and who is paying for it.

Although the disease associated with the SARS-CoV2 virus is known as COVID-19, for most of us it is linked to most of 2020 and hopefully less of 2021. I remember the first time that I thought "Whoa, this is serious" was when the first Hamilton resident, a physician tested positive. I taught a class that afternoon and that was the last live teaching that I have done. The next day I bought a Zoom account and that is where I now spend much of my life.

Picking an aspect of this pandemic to write about was not easy; there have obviously been, and will continue to be devastating consequences for many people. I do not want to belittle this impact. However, we can't ignore the fact that there have been many unexpected positive outcomes (I've had 106 weekly Zoom meetings with extended members of my and my wife's family). I try not to think too much about how it took a lethal pandemic for us to start an activity that we should have been doing anyway.

I've chosen to write briefly about the impact of COVID-19 on research activities. Since the start of the pandemic, HiREB (the Hamilton Integrated Research Ethics Board) has processed 167 new research studies requiring human participants and directly related to COVID-19. Most of those seemed to come in the first week. Many of these are amazing and vital. Studies aimed at developing and validating rapid diagnostic tests have already put important tools into the hands of front-line workers. Studies aimed at demonstrating the safety of personal protective equipment were started at McMaster and have been embraced by the WHO as being essential in ensuring the safety of front-line health care workers.

Research on PPEs started first at McMaster University McMaster researchers rapidly started essential clinical trials that quickly demonstrated the futility of interventions that were put forward as being useful in combating COVID-19. Chairing the research ethics during this time has been immensely rewarding. The HiREB team worked round the clock for the first two months of the pandemic to ensure that essential research was structured in an ethically feasible manner and that studies started as quickly as possible.

There is no doubt that the crisis has acted as a catalyst for research, and much of it has been outstanding. But, 167 is a big number! Many of you work in labs that have been shut down for periods of the last year, based on research activity deemed nonessential. Sound oversight from above, aimed at preventing spread of the virus shut down research activities not addressing COVID-19 or deemed not essential for other reasons. Not surprisingly we received many applications where researcher simply inserted the word COVID into existing research activities. Rather than point fingers, I will use an analogy. If you are a baker and make your living writing books on how to bake cakes and are told that the only books that can be published need to deal with COVID-19, you are going to write a book with the title "How to bake a cake during the COVID pandemic".

I was also asked to sit on a "rapid call" CIHR grant review panel, assessing applications aimed at improving COVID diagnosis. In the past, every CIHR panel I have been on involved applications with an average score above 4 on a scale from 0-5, with rare grants receiving scores less than 3. This reflects the outstanding quality of medical research in Canada. On this rapid COVID panel, however, of the 12 grants I looked at, only one of them received a score greater than 3 (it was outstanding!). The rest were diabolically bad.

I have thought about these two observations, where researchers are putting in research of questionable relevance (baking a cake during COVID-19 is not that different to baking it at any other time) and quality. It reminds me that our jobs are based on an ongoing conflict of interest. One way in which we look at a call from the CIHR to address COVID-19 is "Oh good, my ideas can be used to help fight the pandemic",

while another view is "Ooooh, Money!!". I have run a lab for many years, I know that I have often thought "Ooooh, Money!" As researchers we need money to run a lab, to pay students, to buy mice – none of that is cheap! I have written grant applications with aims that are versions of baking cakes in the face of adversity.

Four years ago, something happened that changed the way that I think about research money. The Firestone Institute for Respiratory Health (where I work) decide to raise money in a fund-raising activity. I wrote a letter that I sent to my family and friends, describing the unmet needs of patients with lung disease. I talked about my father, who had suffered from severe asthma his whole life. I told people that I knew that their money was precious and that they needed to choose where to give it carefully, but that if they chose to give it to us, it would be well spent. My letter better than I had hoped. I raised \$11,000 and my brother who had just retired after working for 40 years at the post office gave us \$5,000. That knocked me over. For the first time in my career, I looked at the money completely differently. I asked the Firestone director where the money was going to be spent – to buy a new bronchoscope that would be used by clinicians in procedures that they would be able to bill for. "Not a chance not with my brother's money you're not!". As a result, I was put in charge of a committee to decide where the money would go. and we used it to create several graduate studentships. We all work as researchers; the goal of research is creation of knowledge that addresses needs. Those needs (especially over the past year) are manifest and clear. The work that we do as researchers costs money, which we need to find. That creates confusion, where the finding of the money can be equated with success. When I was forced to ask myself whether I would be prepared to take my brother's retirement savings and spend it on a new way to bake a cake, I became profoundly uncomfortable. I am not suggesting that we need to be better at sorting out who is doing the best research, there are all sorts of tools in place to do that. I do think that as researchers we need to be constantly aware of who the research is for, and who is paying for it.

Mark Inman, MD PhD Professor, Dept of Medicine Chair, Hamilton Integrated Research Ethics Board



