



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

45th PARLIAMENT, 1st SESSION

Standing Committee on Science and Research

EVIDENCE

NUMBER 014

Wednesday, November 5, 2025

Chair: Salma Zahid



Standing Committee on Science and Research

Wednesday, November 5, 2025

• (1635)

[English]

The Chair (Salma Zahid (Scarborough Centre—Don Valley East, Lib.)): I call this meeting to order.

Welcome to meeting number 14 of the Standing Committee on Science and Research.

Before we begin, I would like to talk about an issue that is really very important and urgent for all the members. You must have received emails from researchers expressing their concerns about the orders for the production of documents of October 1 and 20.

Mr. Noormohamed, I will come to you. Let me finish this.

The committee's email box has received more than 125 emails from different researchers expressing their concerns about confidentiality. Notably, one letter included somewhere around 3,000 signatures. Because of the number of signatures, it will take some time to translate so that we can get it to all the members.

As chair of this committee, my office has received well over 200 emails from academics in research across Canada who have raised serious concerns about the privacy implications of the production order and its potential impact on research.

As your chair, I bring this to your attention for your information and consideration.

MP Noormohamed.

Taleeb Noormohamed (Vancouver Granville, Lib.): Madam Chair, there has been discussion among some of us about this issue. There are two considerations here. One, how do we assure the research community that they can focus on what they're doing, which is research, and not have to advocate for what seems obvious?

The bigger conversation, the other conversation we've been having, is the cost implication, really, of disaggregated data in this way.

In my inquiry to you, Madam Chair, you have informed me that the bill in order to do this would be \$4 million.

I don't want to waste a lot of time with our witnesses here, but I do want to make sure that we deal with this issue in as expeditious a form as possible, recognizing that there may be other solutions to getting to the right answer.

I note that the \$4 million is just to disaggregate the aggregated data. On top of that, there would be translation costs. It's essential for all of us that everything is available in the two official languages.

Even if we set the translation costs aside for just a moment, we would be spending \$4 million to get our hands on millions and millions of pages of data which, frankly, I don't know that anybody in this room will be able to go through themselves, not even knowing when that might arrive. Will it arrive in this Parliament or the next? It's hard to know.

I think we have an obligation to be pragmatic in what we do. Later on, I intend to put forward a motion that contemplates the notion that we should move to aggregated and anonymized data so that we can get to the same outcome that we need. I hope it addresses what Monsieur Blanchette-Joncas was trying to achieve. I think we would probably be able to agree on this so that we can get to the right outcome.

I want to leave it at that for now. If we have agreement to deal with this in a meaningful way, then we won't take time away from the witnesses.

The Chair: MP Baldinelli.

Tony Baldinelli (Niagara Falls—Niagara-on-the-Lake, CPC): Madam Chair, in response to my colleague, I look forward to studying the motion, and him putting that forward, and looking at it. I'm quite supportive of the ideals he puts forward. No one on our side is looking to spend \$4 million.

Also, from our side, from the Bloc motion, our intent is not to get personal information on individuals who are applying for—

The Chair: I'll just clarify that this cost estimate is from the department.

Tony Baldinelli: Yes.

I look forward to dealing with this when we do committee business and having this resolved.

The Chair: MP Jaczek, and then Monsieur Blanchette-Joncas, I will go to you.

Hon. Helena Jaczek (Markham—Stouffville, Lib.): Thank you, Madam Chair.

Of course, I have the greatest respect for our witnesses and the time that might be taken up, but I'm wondering why my colleague is not anxious to just move this motion right now so that we can clear up this particular issue and hear his motion. I would prefer to hear it right now.

The Chair: I have two people on the list. I have MP Blanchette-Joncas and MP McKelvie. Then we will go to MP Noormohamed.

Jennifer McKelvie (Ajax, Lib.): I'll let him speak for me.

The Chair: Okay.

We will go to MP Blanchette-Joncas and then MP Noormohamed.

[*Translation*]

Maxime Blanchette-Joncas (Rimouski—La Matapédia, BQ): Thank you, Madam Chair.

I understand the importance of this. I obviously wanted to share my thoughts and, of course, my comments and my opinion about the current situation.

First of all, I must admit that I find it a bit odd that you are disrupting the schedule and agenda. Committee business was already scheduled from 6 p.m. to 6:30 p.m. I understand that you consider this to be urgent, but it doesn't seem like the usual thing to do in committee. We have witnesses online who are obviously ready to take part in our study today.

I would like to address the scientific community, which is listening attentively to us today.

As a member of the Standing Committee on Science and Research, it is my duty and responsibility to ensure that federal science policies are administered with consistency, transparency and ethical rigour.

I understand and share the concerns expressed by a number of members of the scientific community following the motion I put forward to the committee. Remember that my motion was adopted unanimously. Let me remind you of its intent. It's not about judging projects or exposing researchers, but understanding, based on data—

[*English*]

Taleeb Noormohamed: I have a point of order, Madam Chair.

The Chair: MP Noormohamed.

Taleeb Noormohamed: Madam Chair, just so we're clear, there were issues and votes that occurred in camera. To disclose those is a problem that we need to address post-haste.

The Chair: Yes. In camera items cannot be discussed as we are in public.

[*Translation*]

Maxime Blanchette-Joncas: Madam Chair, I would just like to share my comments and, of course, my reaction to what you are discussing today.

Let's not forget that my motion was adopted unanimously. Let me remind you of its intent. It's not about judging projects or exposing researchers, but understanding, based on data, whether the federal funding system—

[*English*]

Taleeb Noormohamed: I have a point of order, Madam Chair.

The Chair: MP Noormohamed, on a point of order.

Taleeb Noormohamed: Madam Chair, again, matters that were discussed in camera are now being discussed in public.

The Chair: MP Blanchette-Joncas, we cannot discuss anything related to committee business here in public.

[*Translation*]

Maxime Blanchette-Joncas: Madam Chair, I have a point of order.

Can you explain to me why you started the study today with this item when we had already scheduled a time on the agenda for committee business?

Can you enlighten me on that?

• (1640)

[*English*]

The Chair: Thank you, MP Blanchette-Joncas.

For the information of all members, and to clarify that, this is a very important and urgent issue. It is about the reputation of this committee. We have received correspondence. We have received messages. I have personally met with some members of universities who raised this concern with me. I was at one of the receptions by one of the tri-councils. The president raised it. This is a very important and urgent issue. That's why I am dealing with it now.

If you want to challenge me, you can challenge me, but I feel that as the chair of this committee, it's really important to bring that to the attention of all the members.

[*Translation*]

Maxime Blanchette-Joncas: Madam Chair, you feel this is important, but I think it's important to speak out and explain to the scientific community the purpose of the motion, which, once again, has been adopted.

Either censure me or let me speak. It's up to you. Right now, you've done something completely inconsistent with what you are trying to do.

Either we talk about it at 6:00 p.m., and I'll be happy to ask that it be public so that people can hear us, or you cut me off and tell me that I'm off topic for something that you yourself initiated at the beginning of the meeting.

[*English*]

The Chair: MP Noormohamed, you wanted to say something.

Taleeb Noormohamed: Yes, please, if I may, I would like to move my motion now.

The Chair: Yes, please.

Taleeb Noormohamed: Given the context and trying to keep it as simple and as—

[*Translation*]

Maxime Blanchette-Joncas: I have a point of order, Madam Chair.

[*English*]

The Chair: Yes, MP Blanchette-Joncas.

[Translation]

Maxime Blanchette-Joncas: The motion is not within the scope of today's study, nor is it on the agenda. Therefore, it cannot be moved. Either we continue the discussion, and I offer my sincere co-operation once again, or we continue the ridiculous performance we are currently witnessing.

[English]

The Chair: The fact is that I have raised this issue and this is a concern. I will repeat that this is about the reputation of our committee. Because I have opened this for discussion, I will rule it in order for MP Noormohamed to bring the motion.

Taleb Noormohamed: Thank you, Madam Chair.

The motion will be distributed in both official languages immediately. I move:

Notwithstanding the motion the committee adopted on October 20th and given that the order for disaggregated data will cost more than \$4 million of taxpayer money, the word "disaggregated" be deleted and replaced with the following, "aggregated and anonymized".

Madam Chair, I believe this addresses the assurance that Monsieur Blanchette-Joncas just gave to the community. It also reflects the comments made by my friend opposite, and I hope that it does two things. It gives the scientific community the assurance they're looking for. More importantly, it also assures taxpayers that we indeed, in this committee, continue to be good stewards of their resources and achieve the goals that committee members wish to achieve.

The Chair: Thank you.

We have a motion.

MP McKelvie.

Jennifer McKelvie (Ajax, Lib.): Madam Chair, I would like to thank my colleague for bringing forward this motion. I did speak publicly when this motion was tabled by the member opposite from the Bloc Québécois. I did say that I found it problematic and that researchers may not want their ideas released publicly, especially for unfunded proposals, because there's a potential for others to steal those ideas and because there is privacy involved in that. So, I did comment on that already.

I would also like to point out that, in addition to the letters to committee that we have received, there was an open letter to protect tri-council data that was brought forward. In that letter, it says, "This motion is incredibly damaging, unscientific in its approach, unethical, and puts minoritized researchers and graduate students at risk." It has been signed by 5,000 people.

I would also like to show some of the comments that have come into my office from researchers who are from McGill, the University of Toronto, Ontario Tech, York, Western, the University of Calgary, the University of Alberta, the University of Saskatchewan and more. I have anonymized their names, which is the proper way to deal with these things. They say that the confidentiality of the peer review process is sacrosanct and that this will irreparably undermine trust in the processes that govern peer review. They say that this motion provides no such justification and thus represents an unreasonable and disproportionate invasion of privacy, that it undermines the ethical and confidentiality commitments on which sci-

entific review depends, and that it undermines scientific peer review in Canada and diminishes our reputation in the eyes of the international scientific community.

A letter we have received from SSHRC, one of the tri-councils, says, "As previously communicated, some of the information requested is difficult to access and compile in a usable manner."

I appreciate that our colleague is bringing forward a motion that can provide data, but it should be in a way that makes sense fiscally and responsibly, that protects the privacy of researchers, that protects intellectual property, and that gives us a way to move forward with the report that we would like to table and have back to committee so that we can assess research excellence criteria in Canada, which is what the study is intended to do.

• (1645)

The Chair: Thank you, MP McKelvie.

MP Blanchette-Joncas.

[Translation]

Maxime Blanchette-Joncas: Madam Chair, I would like to continue my comments on the motion moved by my colleague.

I want to reiterate what I mentioned at the outset. As a member of the Standing Committee on Science and Research, it is my duty and responsibility to ensure that federal science policies are administered with consistency, transparency and ethical rigour.

I understand and share the concerns expressed by a number of members of the scientific community following the motion I put forward to the committee. Remember that my motion was adopted unanimously by the Conservative Party, the Liberal Party and the Bloc Québécois.

[English]

Taleb Noormohamed: I have a point of order, Madam Chair.

What happens in camera in committee business is not to be discussed, but it is now being discussed publicly again. While I appreciate the point that my colleague is trying to make, I think that if we're all going to adhere to rules, we have to follow the same set of rules. I think we're all in agreement on the objective that he's trying to accomplish, but we also have to remember that in camera is in camera.

The Chair: Thank you.

I'll suspend the meeting for a minute to check with the clerk on what was in camera and what was public.

The meeting is suspended.

• (1645)

(Pause)

• (1650)

The Chair: I call the meeting to order.

I want to clarify for all the members that a point of order has been raised by MP Noormohamed, so I will read from page 1029 of chapter 20, “Committees”, of *House of Commons Procedure and Practice*:

Divulging any part of the proceedings of an in camera committee meeting has been ruled by the Speaker to constitute a prima facie matter of privilege.

We cannot talk about anything related to the in camera meeting here. You can talk about this topic, but you cannot refer to any matter related to the in camera meeting.

MP Blanchette-Joncas, go ahead.

[*Translation*]

Maxime Blanchette-Joncas: Madam Chair, let me remind you that on October 1, when we passed this motion, the committee meeting was public. As a member of Parliament on the committee, I have the right to speak on this subject.

I just want to reassure the people listening to us who are worried. I'm not looking to waste anyone's time right now. I even find it unfortunate that the witnesses here today are witnessing our discussions.

I honestly thought we were going to deal with this at six o'clock. Before starting the meeting, I even told my colleagues that I was ready for us to make the meeting public so that people could listen to us and record all our discussions.

I would like your co-operation in simply expressing myself for a minute and conveying to the scientific community a message that has resonated with me as a member and vice-chair of this committee.

I want the scientific community to hear us, because they are currently worried. I just want to reassure them on the original intent of the motion.

• (1655)

[*English*]

The Chair: Thank you.

Is there any other debate on this motion?

Yes, MP Blanchette-Joncas.

[*Translation*]

Maxime Blanchette-Joncas: Madam Chair, I have a question for you.

I'm trying to understand. Can you let me finish the statement I've been trying to read since the beginning of the committee meeting? I would just like to tell the scientific community what I want to do and what the purpose of this motion is, to provide access to disaggregated data. That's my only goal.

Then we can vote on the motion and move on. We can certainly continue the work on the study planned by the committee.

[*English*]

The Chair: Yes, you can speak. You have the floor.

[*Translation*]

Maxime Blanchette-Joncas: Thank you.

What I was saying a little earlier is that the motion that was unanimously adopted on October 1, in public, was not intended to judge projects or expose researchers. It was more about understanding, based on data, whether the federal funding system results in systemic discrimination or inequities in terms of language, institution size, gender, discipline or institutional prestige.

I am aware that this initiative may have been mistakenly perceived as a threat to confidentiality. I also understand the distrust of the community at a time when, internationally, science has sometimes been weaponized for political purposes, particularly as we are currently seeing from our neighbours to the south. However, here we're not talking about interference or ideology; we're talking about accountability and institutional responsibility. I want to reiterate that such sensitive data cannot be made public. We had all debated it and agreed to anonymize the data. It's a discussion I've had publicly with my colleagues, and it's even available online.

This debate arose out of a very real case. Researcher Julien Larregue, under the federal research on research initiative, led jointly by the Social Sciences and Humanities Research Council, the Canadian Institutes of Health Research and Michael Smith Health Research BC, wanted to study the distribution of scientific funding in Canada. However, while the initiative is specifically aimed at better understanding funding dynamics, two of the three granting agencies, the Natural Sciences and Engineering Research Council and the Canadian Institutes of Health Research, have refused to share the necessary data with him, despite an approved ethical protocol and strict confidentiality guarantees.

The Social Sciences and Humanities Research Council has agreed to work with him, which shows that it is entirely possible to strike a balance between transparency, rigour and the protection of personal information. My request doesn't come from nowhere. The data from this granting agency is already available to researchers.

The irony is striking: The same organizations that fund research and transparency refuse to make their own operations transparent. However, Julien Larregue's work has gone through all the scientific validation stages. He received a knowledge grant from the Social Sciences and Humanities Research Council and an ethical endorsement from Université Laval. He was also published in the Canadian Journal of Sociology, the country's leading scholarly journal.

My goal today, reflected in my motion, is not to wage an ideological crusade, but to defend a principle of method and responsibility. Transparency should not be seen as a threat to science, but as a condition of its legitimacy. If our system is fair, the data will prove it. If there are imbalances, we have a collective duty to correct them.

Scientific data should never be withheld out of institutional convenience or demanded under political pressure. Freedom of research is based on a balance between autonomy and responsibility. What we are proposing is to ensure balance by putting transparency under ethical and scientific oversight, not political influence. Combining transparency and protection is possible, and even necessary. Countries like Denmark, the Netherlands and Norway are already doing this by giving researchers controlled access to aggregated or disaggregated data on their funding system.

Canada cannot claim to be a model of scientific integrity if it remains opaque about how it distributes its own public funds. Science doesn't exist to protect institutions; it exists to serve society. It thrives not in fear or silence, but in clarity and trust. That trust is what we need to protect together.

That's why I prepared a solution, and I can talk about it in committee business. It includes the possibility of establishing a secure ethical protocol, inspired in particular by the international Five Safes model, which is already used by Statistics Canada, to enable accredited researchers to analyze data without compromising privacy or academic freedom. That way, serious researchers can finally do research on research and politicians and public institutions that use taxpayer funds will be held accountable. This is a necessary step to maintain public trust in our scientific system. I hope that the community has heard us today and understood me clearly about the sincere objectives of this initiative, which was proposed on October 1.

Thank you.

• (1700)

[English]

The Chair: Thank you, MP Blanchette-Joncas.

Is there any further debate?

Go ahead, MP Baldinelli.

Tony Baldinelli (Niagara Falls—Niagara-on-the-Lake, CPC): Madam Chair, I'd like to speak to the motion by my colleague and propose an amendment to it. It's a friendly amendment.

As my Bloc colleague said, this motion was discussed on both October 1 and October 20. I would suggest we use "Notwithstanding the motion the committee adopted on October 1st and on October 20th", and then the wording will continue as indicated.

The Chair: We have an amendment to the motion proposed by MP Noormohamed. It is a friendly amendment. Is everyone okay with it, or do we need to vote?

An hon. member: I would ask for a recorded vote.

The Chair: We will have a recorded vote on the amendment as proposed by MP Baldinelli.

(Amendment agreed to: yeas 9; nays 0 [See Minutes of Proceedings])

The Chair: The motion by MP Noormohamed as amended is now on the floor. Seeing no debate, we will have a recorded vote.

(Motion as amended agreed to: yeas 9; nays 0 [See Minutes of Proceedings])

The Chair: MP Baldinelli.

Tony Baldinelli: Madam Chair, I thank my colleague for bringing forward the motion we've all agreed to.

I want to request that when we go in camera, in the committee business portion, we discuss the analysts actually getting to the preparation of their report so that we can begin working on the actual report.

The data that was requested was never going to be utilized for the purpose of the report. I believe the witness testimony we have is sufficient enough to prepare the report on the criteria for funding.

I'm looking forward to our work on that.

The Chair: Thank you, MP Baldinelli.

After these two panels, we will go to our analysts and we will go from there.

MP Blanchette-Joncas.

[Translation]

Maxime Blanchette-Joncas: Thank you, Madam Chair.

I would like to have your opinion and the consent of my fellow committee members regarding my motion, particularly the alternative to the original motion on disaggregated data that I put forward on October 1. It is about trying to find a confidential and ethical security protocol. I handed it out to my colleagues before the meeting started today.

I'd like to know if it's possible to discuss the motion, since we've already discussed the motion's subject, to try to find a solution that can reassure people while respecting the criteria, the protocols, and the security, confidentiality and ethics processes.

[English]

The Chair: Do you want to bring it forward now?

Please go ahead.

• (1705)

[Translation]

Maxime Blanchette-Joncas:

Because the Social Sciences and Humanities Research Council of Canada, or SSHRC, has already demonstrated its capacity to transmit disaggregated data directly to accredited researchers, in accordance with current ethical and legal requirements.

That the Committee request the government to establish an official and permanent protocol for the secure transfer of data held by the three federal granting councils, namely, the Social Sciences and Humanities Research Council, or SSHRC, the Natural Sciences and Engineering Research Council, or NSERC, and the Canadian Institutes of Health Research, or CIHR, specifically, the disaggregated data for all submitted applications, whether funded or unfunded, across all student and faculty funding programs starting at the master's level.

That this protocol aims to make accessible, in a disaggregated, anonymized and secure form, all data relating to submitted funding applications, whether funded or not, for all student and faculty funding programs, beginning at the master's level.

That this include the (1) demographic data of applicants and collaborators, including applicants' responses to the Equity, Diversity, and Inclusion, or EDI, questionnaire; the (2) applicants' and collaborators' institutions and departments; the (3) the language of the application; (4) all data concerning the type of application and project content (year of application, grant program, discipline, title, abstract, and amount requested by the applicant); the (5) identity of the evaluation committee, comments, assessments, and scores assigned to applications for each criterion; and the (6) the application outcome and amount awarded.

That access to these data be granted to accredited researchers who have received approval from a recognized research ethics board, and that such data be shared under a security protocol consistent with the international "Five Safes" model used by Statistics Canada and its Research Data Centres.

That the government assume responsibility for coordinating this process and submit to the Committee, within sixty days, an action plan specifying the responsible repository organization for data retention and transfer, the anonymization and security procedures, as well as the implementation and dissemination timeline.

As I explained, this is a good-faith solution for trying to help researchers get access to data. The concern I have as a parliamentarian is that one of the three granting agencies is on board, while the other two aren't, as I also explained earlier.

As an elected official and a parliamentarian, I must ensure not only that there is accountability, but also that data is kept confidential.

The motion I'm proposing today will reassure people—I hope—and shows that there are questions to be raised about how things are done, possibly about data management and, above all, about data governance.

I hope to have the support of my colleagues on this. I also hope that the people in the scientific community who are listening attentively to us will understand that we don't transfer or transmit data in any old way. We already handle it properly. Now, we simply want to provide a framework for the process.

Thank you.

[English]

The Chair: Thank you.

MP McKelvie.

Jennifer McKelvie: I have questions. Can I ask a question?

The Chair: Yes.

Jennifer McKelvie: We just went through this exercise when a motion was brought forward and we did not know the cost or the time frame to collect that data. Have you done the due diligence to say how long this will take? We just heard from the vice-chair that he'd like to get on with the preparation of the report, and this will delay it. Do you know how long it will take to collect that data? Do you know how much this will cost? We would like to have the data in both....

There's a cost to collect the data—a new third party is being paid to do this—and a cost to get the translation. Do you know the costs? Given that the last motion was estimated to cost \$4 million, we're again in the realm of a substantial amount of money for this request.

The Chair: Thank you, MP McKelvie.

MP Blanchette-Joncas.

[Translation]

Maxime Blanchette-Joncas: Thank you, Madam Chair.

Again, I want to reassure people. I don't want to get the data, and I don't want the committee to get the data either. I just want us to find another way for researchers who are acting in good faith—again, I feel like I'm repeating myself, but so be it—who are doing research on research and who already have access to data through one of the three granting agencies. SSHRC has already collected the data. As far as I know, the other granting agencies have done so as well. I understand that passing on the data will add a bit to their workload, but it is vital and necessary to be able to analyze how scientific programs and policies are distributed, in particular. That's what I want to do today.

Once again, researcher Julien Larregue, who appeared publicly before the committee, submitted a brief during the study on research funding criteria. He said openly that as an experienced researcher in the field, he could not help analyze any inequities in the research system if he did not have the necessary data. He said he was capable of doing so, but that he didn't have the full picture, only one out of three components.

What we want is just to create a protocol. The granting agencies already collect data in a variety of ways. Once again, we don't want to get the data or analyze it. We simply want to find a way to ensure that the data these researchers need is transmitted to them in a structured and ethical manner, according to an established protocol. This is already being done, except that data governance is currently a problem. I think there's definitely a way to manage the process better, because two out of three people aren't saying the same thing.

Who is right? I think transparency always wins out, for the scientific community and also for public trust in the way public funds are managed.

• (1710)

[English]

The Chair: Thank you.

MP McKelvie.

Jennifer McKelvie: Madam Chair, I have a couple of questions, but I think I'll just move to adjourn debate on this item.

The Chair: This is a dilatory motion.

We'll go to a vote on whether to adjourn debate.

(Motion agreed to: yeas 10; nays 0)

The Chair: We will now proceed to our first panel of witnesses.

We are meeting today to study private sector investment in research and development in Canada.

Witnesses, I would really like to apologize for taking up your time. Sometimes we have to deal with urgent issues. I'm really sorry.

I would like to make a few comments for the benefit of the witnesses and members. Please wait until I recognize you by name before speaking. For those participating by video conference, click on the microphone icon to activate your mic. Please mute your microphone when you're not speaking. For those on Zoom, at the bottom of your screen you can select the appropriate channel for interpretation: floor, English or French. All comments should be addressed through the chair.

Welcome to our three witnesses: Dr. Michelle McGinn, associate vice-president, research, Brock University; Nathalie De Marcellis-Warin, chief executive officer, CIRANO; and Gabriel Miller, president and chief executive officer, Universities Canada, who is here in person.

Thank you once again for appearing before the committee. You will each have five minutes for your opening remarks.

We will start with you, Dr. McGinn. You have five minutes for your opening remarks.

Michelle McGinn (Associate Vice-President, Research, Brock University): Thank you, Chair.

The question before the committee is how to best promote and grow private sector investment in research and development in Canada. The key message that I want to leave with you is the importance of thinking broadly and thinking regionally as you tackle this question.

The challenges cannot be solved by investing exclusively in major population centres, U15 institutions and multinational companies. It's critical to engage broadly to tackle the issues that our industries, our communities and our nation face. I want to encourage you to recognize comprehensive research institutions as critical drivers for engaging private sector investment.

I'm speaking to you as the associate vice-president, research, at Brock University, which is a comprehensive research institution that was initially founded due to the advocacy, lobbying and fundraising efforts of the local Niagara community. Unionized workers donated directly from their paycheques to build this university to educate their children and the next generations of the workforce who would go on to create opportunities and shape the future of this region. Since those early days, the university and the community have continued to work in partnership to assure our mutual success.

Brock's origin story is unique, but the resulting university–community partnerships are emblematic of what can and does happen around comprehensive research institutions across this country. Comprehensive research institutions are established partners within our local communities, and we are major players in driving the economic prosperity of our regions. We provide the expertise, talent and infrastructure necessary to build and grow the economy. Our students, faculty and alumni are the entrepreneurs and leaders who launch and expand businesses in our communities.

Their businesses, especially the small and medium-sized enterprises, form the backbone of the Canadian economy and account for more than 48% of the country's gross domestic product. Given their scale and scope, small and medium-sized enterprises cannot

fulfill all of their R and D needs in-house. They need access to the talent and infrastructure located within post-secondary institutions.

How can you help them to build and sustain partnerships with comprehensive research institutions to advance innovation and market share?

First, I urge you to continue to invest in industry–university partnerships through Mitacs, the Natural Sciences and Engineering Research Council and other such programs that incentivize industry partners to make direct investments in projects with the potential to secure matching federal investments. Industry partners need simple and efficient means to leverage their investments to accomplish more than is possible on their own.

These collaborative projects cement long-lasting relationships between industry and university partners, and they provide phenomenal training ground for student interns, who develop the skills and mindset that will set them on career trajectories within the research and innovation sphere. These partnerships provide mutually beneficial spaces for students and industry partners to witness and learn from each other and to envision their futures together. As Dr. Marc Nantel, vice-president of research, innovation and strategic enterprises at Niagara College, argued in an earlier meeting of this committee, one of the best ways to transfer technology is to hire the brain that solved the problem.

In addition to opportunities for individual businesses, it's also important to engage industry associations in promoting private sector investments. One of the key successes for Brock University's Cool Climate Oenology and Viticulture Institute is that the projects we undertake are in direct response to the identified research priorities of the grape and wine industry associations.

Collectively, the Grape Growers of Ontario, Ontario Craft Wineries and Wine Growers Ontario came together to form Ontario Grape and Wine Research Inc. to identify and communicate annual research priorities and to coordinate financing through member levies to advance related research and development projects. It's a phenomenal collaborative model that is enhancing the profitability and sustainability of the Ontario grape and wine industry. It's a model that could readily expand to other parts of the country and to other agricultural commodities and far beyond.

Comprehensive research universities, small and medium-sized enterprises, student interns and industry associations all have important roles to play in promoting public sector investments in research and growing Canada's economy.

Thank you for the opportunity to address the committee.

• (1715)

The Chair: Thank you.

We will now proceed to Madam Nathalie De Marcellis-Warin, the chief executive officer of CIRANO.

You will have five minutes for your opening remarks.

[*Translation*]

Nathalie De Marcellis-Warin (Chief Executive Officer, CIRANO): Thank you, Madam Chair.

Thank you for inviting me to appear before you today.

The difficulty in bridging the gap between science and the market is not new. It has been hampering Canada's competitiveness for more than two decades.

Canada has a solid technological and scientific base. Our universities are among the best in the world. Our researchers are internationally recognized, and several sectors—from aerospace to artificial intelligence to life sciences—demonstrate remarkable expertise. Our publicly funded basic research is an essential pillar of this ecosystem. It fuels discoveries, trains talent and creates the foundation for value-creating innovation, but this potential remains under-exploited.

The data confirms the extent of this gap. As the world's ninth-largest economy, Canada has only 24 companies among the 2,000 most innovative companies on the planet, according to the European Innovation Scoreboard 2024, published by the European Union. France has 50, and South Korea has 83.

In the recently released Global Innovation Index 2025, Canada has fallen from 14th to 17th place out of the 139 countries evaluated, mainly due to a decline in its output ranking.

Private investment in research and development, or R and D, accounts for 1.07% of gross domestic product, or GDP, compared to an average of 2% among Organisation for Economic Co-operation and Development, or OECD, countries. South Korea, cited as a model of science-industry integration, devotes nearly 5% of its GDP to R and D. What is important is that 79% of the investment comes from the private sector. In Canada, it is just under 55%. Small and medium-sized enterprises, or SMEs, which make up 98% of our economic fabric, account for 60% of employment, but only 30% of private R and D spending.

The tax incentive program for scientific research and experimental development was amended in 2024 and again yesterday in the 2025 budget statement. This should help to increase the share of private investment in R and D.

Beyond the financial aspect, companies, and particularly SMEs, need two other components to translate discoveries and inventions into concrete applications that will find a place in the market. The first is support for experimental development. The second is access to a pool of talent and expertise trained in applied research and technology transfer.

The first component concerns support during the phase when research becomes a prototype, a proof of concept, a product or a validated process.

In Europe, this link is filled by organizations such as “research and technology organizations”, or RTOs. These non-profit structures combine infrastructure, knowledge and skills. Their mandate is precisely to translate knowledge into transferable prototypes and patents. The European Association of Research and Technology Organisations, EARTO, which brings together more than 350 RTOs, has shown that they play an essential role in attracting private funding for innovation by sharing the risks of experimental development and linking public research to the needs of businesses.

Canada must take inspiration from this and support this transitional R and D. Initiatives and organizations exist across Canada. We have some in Quebec. Canada would benefit from structuring and supporting a Canada-wide applied research network based on RTO models, capable of working with universities, colleges and businesses, especially SMEs, at every stage of technological development.

The second component concerns talent. According to the Conference Board of Canada, access to a skilled workforce directly influences investment decisions. Businesses invest more in R and D when they can also count on talent trained in interface skills, such as R and D project management, technology transfer or commercialization.

Universities have a key role to play in promoting internships in companies and training in such interface skills.

For university researchers, it is difficult to combine publication goals and the need for rapid results from companies, in addition to intellectual property barriers. Canada could explore models that support applied research and the recognition of hybrid career paths.

The German Fraunhofer model offers a response to these obstacles. More than 75 institutes led by university professors are jointly funded by the government and industry. Fraunhofer researchers and their teams, including master's and doctoral students, often work on the premises of partner companies. This proximity creates a shared culture of innovation, where applied research, training and commercialization reinforce each other. According to assessments by the German Ministry of Research, every euro invested in these institutes generates more than three euros in economic benefits.

Furthermore, in a context of skilled labour shortages, a study by the Centre for Interuniversity Research and Analysis on Organizations, CIRANO, has shown that, in order to promote the adoption of artificial intelligence, for example, it is also important to focus on skills development in the workplace through mentoring and learning approaches in applied research projects, among other things. These initiatives help strengthen the innovation capacity of businesses. Such programs can be implemented with universities or within the framework of RTOs, which offer an environment conducive to knowledge transfer and practical training for both trainees and business staff.

In conclusion, to bridge the gap between science and the market and increase private investment in R and D, Canada should strengthen support for experimental development, structure and support a Canada-wide network of applied research inspired by RTOs, and invest in partnership-based research talent and knowledge transfer.

• (1720)

Thank you for your attention, Madam Chair.

[English]

The Chair: Thank you.

We will now proceed to Mr. Miller.

You have five minutes for your opening remarks.

Gabriel Miller (President and Chief Executive Officer, Universities Canada): Thank you so much, Madam Chair and honourable members, for inviting me to appear here today.

• (1725)

[Translation]

There are 97 universities of all sizes in Canada. Together, they form a dynamic research ecosystem that is essential to the country's prosperity.

[English]

Canada's universities help power the country's innovation economy. They bring together people, research and ideas that drive progress. Each year, universities train 1.4 million students, who learn how to think critically, work with new technologies and bring innovation into the workplace.

Our members are driving breakthroughs across every field. At the University of Manitoba, Dr. Mark Belmonte's team is developing a fungicide to stop white mould, the top killer of Canada's \$30-billion canola crop.

Despite our strengths, however, Canada's commercialization pipeline remains underdeveloped. Our venture capital ecosystem is smaller than the United States', where private investors are more able to take risks on early-stage innovation. Small and medium-sized businesses, which make up 95% of Canada's private sector, often lack the time and capacity to invest in research or pursue patents. As a result, too many Canadian innovations are sold abroad and too much of the economic value leaves our country.

However, there are solutions. Here are four steps that can help close the gaps in our innovation system.

One, expand support for commercialization at universities. Programs such as NSERC's alliance, idea to innovation and lab to market are good models, but they need scaling up. Increasing support, including through CIHR, will help discoveries in health, biotech and other fields reach their full commercial potential.

Two, strengthen university tech transfer and accelerator infrastructure. Funding for intellectual property offices, incubators and accelerator programs helps researchers turn ideas into start-ups that grow in Canada and create jobs here at home.

Three, engage universities in national, sectoral projects. Aligning research and talent development with business priorities and public procurement can accelerate commercialization. Universities welcome the signalling in yesterday's budget that the defence industrial strategy will leverage industry and university research and promote commercialization of the dual-use research that could spin out of it.

Four, partner with universities to advance artificial intelligence. AI can raise productivity across our economy. Universities are already leads in AI research, and they help communities adopt these tools through training and applied projects. Expanding these partnerships will help Canada lead in this fast-moving field.

Canada's universities are ready partners in building a more innovative, competitive and prosperous future. By working together, we can turn Canadian discoveries into Canadian success stories.

[Translation]

Thank you for giving me the opportunity to speak today. I am ready to answer your questions.

[English]

The Chair: Thank you, Mr. Miller.

Now we will go to our round of questioning. The time with the first panel will be about 37 minutes, and the time with the second panel will also be about 37 minutes. In the first round, we'll probably have just six minutes each. We will see toward the end if we can have a minute or so.

We will go to Ms. DeRidder for six minutes.

Kelly DeRidder (Kitchener Centre, CPC): Thank you.

I'll be splitting my time with Mr. Baldinelli today because of the change.

My question, through you, Chair, is for Gabriel.

You mentioned funding for accelerator programs, which I don't disagree with at all. There are three wonderful accelerator programs in my community. The problem I see, though, is that we do a very good job of incubating and educating, but because of the current climate—high taxes and red tape—scaling-up isn't happening, so B and C funding isn't available to these start-ups. We're paying taxes to promote and incubate these companies, but then they're leaving Canada because it's easier to scale up in, say, the United States.

What do you think would be a solution to that? How can we make more of an investment climate for scalability here in Canada so there isn't a negative net return on our investments, as things stand today?

Gabriel Miller: Through you, Madam Chair, I appreciate the question.

I should say that, in terms of creating a more business-friendly environment, it's important for you to be talking to the business community about that. I'm sure you are. For us, I think what we're most focused on is strengthening the bridge between the research that's being done in our universities and the business community outside, and recognizing that Canada's business community does face obstacles that need to be overcome so that it can benefit from the investments in research and the opportunities to scale them up here and keep more of those benefits here at home.

That's our focus today, but I appreciate your question. I'm very glad to hear that those incubators are providing value in your community.

• (1730)

Kelly DeRidder: They are, for sure.

I'm going to cede my time to Tony. I just wanted to ask that one question of you, Gabriel.

Thank you.

Tony Baldinelli: Thank you to the witnesses for being here this afternoon.

Dr. McGinn, thank you so much for joining us today from Brock University, our local university in Niagara. I'm pleased to say that I'm a proud father of a Brock University student in his second year.

In your remarks, you talked about the establishment of the Cool Climate Oenology and Viticulture Institute in 1996. It really talks to what you mentioned in your remarks, about thinking broadly and regionally in responding to the needs of both the business community and in essence the agricultural community as well.

How does Brock work with the local grape growers and wine producers in Niagara to unlock the private sector research funds to support research, new product development and so on?

Michelle McGinn: Thank you for sending your child to our institution.

Brock works very closely with the grape and wine industry in lots of ways. Members of the industry are part of our advisory committee. The industry came together to fund and found the Cool Climate Oenology and Viticulture Institute. As part of that, Ontario Grape and Wine Research Inc. provides to us on an annual basis what their research priorities are to ensure that the research that happens through the Cool Climate Oenology and Viticulture Institute is directly tied to the research needs of the community.

When a specific question or topic comes to us from an individual grape grower, winemaker or wine producer, or from any point in the pipeline, we assemble a research team to resolve that question. Because it is directly related to a question that they have, they can see that our institution is responsible and responsive to their needs, and will be able to invest or put their money towards whatever that

topic is in such a way that it can build together, and in many cases leverage some other external funding as well, and pull those together to solve a challenge that an individual industry partner may have or that is also relevant to the broader industry. If a question about one particular—

Tony Baldinelli: My time is short, and I also want to get an opportunity to talk about the BioLinc incubator. There's another success story locally. Destiny Copper comes right out of Brock University from Greg Hanna, the CEO, who came from the BioLinc incubator, and Professor Ian Brindle.

To my colleague's point, you generate that idea and you use the incubator to foster it and grow it. Then, to be able to scale it, how do we go through that process? How was Brock able to help?

Michelle McGinn: It's about having some of the minds who are behind those ideas generated in this space to take those out, but it's also about the relationship built during that time frame. Destiny Copper is a great example. We can see the work they came through with in identifying with copper, how they can extract copper, and to do the very many things they can do with that. It's also about the relationship that's built, which then expands to other potential relationships.

We had a researcher here who was called into a local community to try to resolve an issue with algae bloom in the local waterway. By studying that algae bloom, he discovered that the algae was actually extracting heavy metals from the water. There was copper in there. Destiny Copper is now working with the copper being extracted from the algae bloom. In solving that algae bloom problem, now there is a relationship there, and Destiny Copper now has access to copper to continue their work.

The Chair: Thank you. The time is up.

We will now proceed to MP Jacek for six minutes please.

Hon. Helena Jacek: Thank you so much, Madam Chair.

Thank you to all the witnesses for your testimony.

Dr. De Marcellis-Warin, you made reference to European models. I think you called them RTOs. In particular, you mentioned Fraunhofer in Germany. We heard a couple of other witnesses during the study make reference to Fraunhofer.

Could you specifically identify the areas where, in your view, these models are successful? What are we missing here in Canada? What is the specific move attracting private investment, moving through to commercialization and intellectual property?

Perhaps you could elaborate a bit.

• (1735)

[*Translation*]

Nathalie De Marcellis-Warin: Thank you, Madam Chair.

Indeed, the examples I have presented are cases where attempts have been made to bring fundamental research closer to businesses. The aim is to exploit inventions, but also to carry out what I call transitional research. This means that researchers conduct more applied research and ensure that they produce prototypes and find practical applications, for example. This is what they are doing in the many institutes that have been set up in Europe, particularly in Germany.

Ultimately, the most important thing is to demonstrate that what is done in fundamental research can be used and applied in certain fields. Proof of concept is needed. From there, as this experimental research is sometimes quite costly, the costs and risks involved are shared. This makes it possible to showcase fundamental research and transform it.

Often, what is missing here is this applied research component. As I said earlier, researchers sometimes have great difficulty protecting their intellectual property and finding the right people or industries to apply their research. The institutes I mentioned can play this role and fulfill this mission. Most of their researchers do applied research and do not have academic careers with publication goals, but they still have very important expertise and will focus on the link with businesses.

[*English*]

Hon. Helena Jaczek: Thank you for that.

In other words, the institutes bring the parties together so that there's collaboration from the get-go, so to speak. It starts with an idea, and then businesses are interested and need development, and so on.

In terms of your institute, CIRANO, is this exactly how you're functioning here in Canada? What are you missing in this whole transition from idea to commercialization?

[*Translation*]

Nathalie De Marcellis-Warin: I thank the member for her question.

We are studying innovation analysis, and we find that, most of the time, what we lack is financial support to ensure the sustainability of these models. In Germany and elsewhere in Europe, funding for institutes is distributed in such a way that one third comes from public funds to ensure their sustainability, one third comes from industrial contracts, and one third comes from licences and private revenue.

In Quebec, there are a few examples, such as INO, which is a centre of expertise in optics and photonics, and the Computer Research Institute of Montreal, or CRIM, for artificial intelligence. However, we see that they mainly obtain private contracts to support their work, but they do not have the funds to ensure the sustainability of their operations. Ultimately, what is important is to define transitional research as one of the essential links in the success of R and D.

Obviously, these institutes attract private funding because they attract industry, but they lack this source of public funding. In Europe, institutes also seek competitive public contracts. They participate in major competitions such as Horizon Europe. They are stake-

holders because they have strong links with universities and businesses. They still receive significant public funding to ensure their operation.

[*English*]

Hon. Helena Jaczek: You also mentioned tax incentives. There have been some announcements in our most recent budget, which is public. Do you see that this is going to be valuable going forward?

[*Translation*]

Nathalie De Marcellis-Warin: I think so, yes.

Actually, tax benefits are incentives, and they're really important for businesses when they find a profitable opportunity to bring something to the market. When these incentives were improved, we'd already measured how effective they were at attracting private investments in research and development. As I said, though, tax benefits aren't enough. Having a pool of talent and expertise is also important. The experimental development of discoveries, something I talked about earlier, is difficult to fund, and that's a weakness that needs to be strengthened.

There's a difference between discovery and innovation. Discovery is the search for new ideas with potential, while innovation is what opens the door to commercializing an idea or capturing its value to build wealth. That's the really important part: finding real-world applications for ideas.

The changes made to the scientific research and experimental development program will attract more private investment, because the program's benefits will apply to every dollar invested. That said, tax benefits are not enough. It's also important to invest in talent, and to strengthen the weakness that is the experimental development of discoveries.

• (1740)

[*English*]

Hon. Helena Jaczek: Do I have some time left?

The Chair: You have seven seconds.

Hon. Helena Jaczek: I'll cede that.

The Chair: Thank you.

We will now proceed to MP Blanchette-Joncas for six minutes.

[*Translation*]

Maxime Blanchette-Joncas: Thank you, Madam Chair.

Mr. Miller, in the budget, the government states that it wants to make Canada a world leader in innovation. However, the budget doesn't include any increase in funding for basic research, for the three granting councils or for universities. There's nothing, not even to help with inflation.

How can Canada become a leader in innovation if the government won't invest in universities, researchers or the next generation of scientists? They are the foundation of innovation.

Gabriel Miller: Thank you for the question.

[English]

It's true that there is a long way to go to make Canada into the leader in science and innovation globally, but we are encouraged by yesterday's budget for a few reasons.

One is a major investment in bringing and developing research talent in Canada. Another is a recognition that there are enormous economic benefits for Canada to be captured if we strengthen the relationship between our strategic objectives in areas like defence and sovereignty, the universities where research takes place and the business community. We can meet our objectives in research and defence but also expand our economy and capture more of those benefits here.

Most of all, what is striking about yesterday's budget is the vision for the country's economy. It clearly recognizes the vital role universities would be playing. That gives us a foundation for building a long-term vision for science and innovation in universities in Canada. That will help us achieve the leadership you're describing.

[Translation]

Maxime Blanchette-Joncas: Mr. Miller, in its budget, the government proposes to invest an incredible amount in public computing infrastructure for AI. However, this support will come from organizations under the direct responsibility of the federal government, that is the bureau of research, engineering and advanced leadership in innovation and science, a new federal body also known as BOREALIS, and Industry Canada. The budget doesn't mention anything about working with universities or giving researchers priority access.

The government is replacing open science with a centralized industry-oriented platform it will control.

I'd like to know Universities Canada's position on this. How does this budget work for you as it relates to the basic research being done in your member universities?

[English]

Gabriel Miller: You're absolutely right that our system requires fundamental research, and there are substantial investments being made in that area. The government made important commitments in budget 2024 and we expect those to be followed up on.

We also know we're at a moment in Canada where we need to make targeted, mission-driven investments to transform our economy and, frankly, to bolster our position on the world stage. It is not a replacement for basic research funding. This is absolutely correct, and I strongly agree with you, but it is an important complement, and it is part of a national mission that universities want and can be part of today.

[Translation]

Maxime Blanchette-Joncas: Thank you.

Ms. De Marcellis-Warin, many witnesses have talked about the applied research being done in colleges and college centres for technology transfer, in part because of how important these establishments are for the regions they're in. The role of university research is not mentioned as much.

As an interuniversity research, liaison and transfer centre, CIRANO acts as a link between basic research and the real-world economy.

Could you tell us how your approach differs from the applied research approach?

How do you transform university research results into a real-world tool for businesses and public policy?

Nathalie De Marcellis-Warin: Thank you for the question.

College centres for technology transfer, or CCTTs, are a good example when it comes to technology transfer.

CIRANO collects evidence to help governments make better decisions. Our role is to carry out research in social and human sciences, namely in economy, but we also try to come up with solutions. We make public policy recommendations to all levels of government, and try to bring together public and private sector stakeholders in this ecosystem so they can think collectively.

We do this on a regular basis. That's our role. Our research studies are always discussed beforehand. First, we set the priorities, and look at topics of interest for both researchers and public decision-makers. We have a whole list of research topics to choose from, and we have access to economic-analysis data.

We make sure to publish all research results, regardless of the type of results or the level of government the research was for. We prepare briefing notes and make applicable recommendations. That's really our role: to make recommendations. We look at how feasible they are, and how they will impact government finances and civil society actors.

With our approach, science is at the service of public policy decision-making.

• (1745)

Maxime Blanchette-Joncas: CIRANO works with a large number of universities, businesses and public agencies.

How do you manage intellectual property and commercialization under that partnership model?

The federal government doesn't have a clear framework on intellectual property from public research. Does that make your job more difficult when it comes to technology transfer and commercialization?

Nathalie De Marcellis-Warin: All CIRANO members are university professors. This means CIRANO doesn't manage the intellectual property; universities do.

However, we're working on that. Depending on the circumstances, it can be necessary to manage intellectual property to avoid certain issues. Some research leads to dashboards or products. When that happens, the researcher and university hold the intellectual property rights.

We help the research move forward.

[*English*]

The Chair: Thank you.

We will have two minutes for each party, and then we will end this panel.

I will go to MP Baldinelli for two minutes.

An hon. member: Actually, it will be Mr. Holman.

The Chair: Okay.

Mr. Holman, please go ahead. You will have two minutes.

Kurt Holman (London—Fanshawe, CPC): Thank you, Madam Chair.

Thank you to all the witnesses here tonight.

My question is for Mr. Miller.

In an op-ed titled “Talent could be Canada’s missing link in nation-building”, published in iPolitics on October 16, you state, “Years of sudden policy shifts and constrained funding have eroded public confidence, driven up costs, and made it harder for universities to deliver the skilled graduates Canada needs.”

During this study, I have often heard that many Canadian academics end up seeking opportunities south of the border due to a lack of innovation and investment happening here in Canada. Is this a concern, especially given existing barriers to delivering the skilled graduates Canada needs?

Gabriel Miller: It’s been a long-term concern, I think, that Canada has not been as effective, as sustained or as substantial in its investments in future talent as we think Canada needs to be. We believe yesterday’s budget indicated that the government sees the need to shore up our development and retention of talent and to make strategic moves to improve it, so that’s encouraging.

However, to really be first-rate, we need a long-term commitment to this and to stay steady in our policy commitments.

Kurt Holman: Thank you, Mr. Miller.

How can Canada combat the brain drain that we see when our homegrown Canadian talent leaves to seek better opportunities elsewhere?

Gabriel Miller: There are two aspects to this. One is that we need to be able to provide really outstanding opportunities for the best and brightest here to learn and do research. We are taking some steps in that direction that I think are encouraging. Then, as this committee is looking at, there need to be opportunities for them to step out and commercialize and apply what they’ve developed inside the university. Clearly, there are areas where we need to strengthen that pipeline. There’s enormous value being created within the universities, and we believe we can get more value out of that for Canada if we make some strategic investments in the pipeline that bridges it to the economy.

Kurt Holman: Thank you, Mr. Miller.

Again—

The Chair: The time is up.

We will now proceed to MP Noormohamed for two minutes.

Taleeb Noormohamed: Thank you, Madam Chair.

Thank you to the witnesses for being here.

I’ll start with you, Mr. Miller.

One thing I spend a lot of my time worrying about is how we access early-stage capital for a lot of innovation coming out of universities. Obviously, some of the initiatives in this budget will help with that, but with your experience, what would you say is the one thing that would help unlock more early-stage capital for some of the innovation coming out of Canada’s research institutions, particularly our universities, where you often have great ideas that don’t see the light of day?

In addition to that, what are some of the supports, outside of financial supports, that you see innovators in research universities needing to be able to thrive? Is it mentorship? Is it partnership with the sector? What are those things?

• (1750)

Gabriel Miller: Let me focus on just one aspect of this.

Obviously, there are specific challenges in Canada, especially in comparison to the United States, in being able to mobilize the capital and really scale things up. There’s a chicken-and-egg situation here, because the desire is to attract capital from where it is, and that often leads to the IP and the talent leaving Canada.

I’m struck by the anecdote from Brock University. I visited Brock a little while ago, and what’s so striking about that relationship with the wine industry is how close it is and how seamless and ongoing it is. There is a lesson for the whole sector and the economy, which is that attracting capital, scaling up and commercializing all hinge on those connections being made and being continuous.

One thing we need to continue to focus on is supporting the programs and initiatives that bring university research into contact with commercial entities outside of the university, which can then benefit from it and carry on in an ongoing dialogue that’s mutually beneficial to both sides.

The Chair: The time is up.

We will now end this panel with MP Blanchette-Joncas for two minutes.

[*Translation*]

Maxime Blanchette-Joncas: Thank you, Madam Chair.

Ms. De Marcellis-Warin, CIRANO has established itself as an important actor in analyzing economic and social data, and enhancing their value. This field plays an essential role in helping governments make informed decisions. That said, this type of innovation, focused on collective benefits, doesn’t always lead to direct commercial benefits, so it’s not often recognized.

How can this type of public innovation be better supported in a federal system that still tends to measure results on the basis of market potential?

Nathalie De Marcellis-Warin: I thank the member for the question.

You raise a very good point. We're talking about social and economic innovation here. CIRANO even makes public policy recommendations.

It would obviously be important to recognize, in the research continuum as a whole, that the economy and the social sciences also introduce innovation into our systems. However, you're right in saying that it's difficult to evaluate and measure. That said, the benefits could be considerable.

We know that when we recommend public policies in health, education or the environment, the introduction of those policies will bring economic benefits. It's social innovation, but it's not commercialized.

It will be important to promote other forms of innovation, such as organizational innovation, process innovation, economic innovation and social innovation. Obviously, innovation doesn't always mean technology.

Maxime Blanchette-Joncas: Thank you.

Isn't Quebec's model of greater integration between public research, business and society an example to follow, with organizations such as CIRANO, Axelys and Synchronex?

Nathalie De Marcellis-Warin: Yes, absolutely.

Actually, CIRANO is an interuniversity research, liaison and transfer centre whose mission is to combine knowledge with decision-making. We've specified that in our mission statement, just like other centres that have the same mission.

We conduct applied research on social issues and challenges for all three levels of government. We always make sure to link in all stakeholders and to transfer knowledge. We write briefing notes and mobilize knowledge.

An important element of our mission is not to stop at applied research. The same applies to the other organizations you named. We have to go further, and understand the government's needs, tackle social issues, and recognize how important expertise is to research.

Research in economics and social sciences is very important for society.

Maxime Blanchette-Joncas: Thank you, Ms. De Marcellis-Warin, and congratulations on the work you do.

Nathalie De Marcellis-Warin: Thank you very much.

[*English*]

The Chair: Thank you.

With that, this panel comes to an end.

I have to make an important announcement. I would like to wish MP Jaczek a very happy 75th birthday.

Some hon. members: Hear, hear!

Kelly DeRidder: Shall we sing?

Taleb Noormohamed: Do we have unanimous consent for that?

The Chair: I have brought a cake. Maybe we can cut it quickly during the break.

I will suspend the meeting.

I will take this time to thank the witnesses. I apologize for the delay. Sometimes these things happen. I apologize for that. Thanks a lot for appearing and providing your important input.

The meeting is suspended.

- (1755) _____ (Pause) _____
- (1805)

The Chair: I call the meeting to order.

I would like to make a few comments for the benefit of the new witnesses.

Please wait until I recognize you by name before speaking. For those participating by video conference, click on the microphone icon to activate your microphone, and please mute your microphone when you are not speaking. For those on Zoom, at the bottom of your screen you can select the appropriate channel for interpretation: either floor, English or French.

I remind you that all comments should be made through the chair.

With that, I would like to welcome our witnesses for the second panel.

We are joined by Dr. Michael May, chief executive officer, OmniaBio; Dr. Steven Murphy, president and vice-chancellor, Ontario Tech University; and Vasiliki Bednar, managing director of The Canadian Shield Institute for public policy.

Welcome to the witnesses. All of you will have five minutes for opening remarks, and then we will proceed to the rounds of questioning.

We will start with Dr. May.

The floor is yours. You have five minutes.

Michael H. May (Chief Executive Officer, OmniaBio Inc.): Thank you, Madam Chair, for the opportunity to be here today.

I'm here as the interim CEO of OmniaBio, a CDMO that was spun out of the organization that I am CEO and founder of, the Centre for Commercialization of Regenerative Medicine, or CCRM.

As I speak, I would like you to think of three themes.

First of all, there are many structures, programs and entities that we can leverage that exist. One of the needs is to create critical mass amongst those activities, not to spread things too widely and to focus on areas of excellence when attracting the private sector. The private sector is made up of large multinationals, anchor companies, scaling companies and emerging companies driven by entrepreneurs and by the investors who invest in all of those opportunities.

What is the private sector investor looking for? They are looking for talent, expertise and infrastructure. Therefore, we need to continue to invest in basic research in this country. They are looking to leverage and to de-risk opportunities.

Also, more and more, private sector investors are looking for ecosystems. There's not one solution to any of the challenges in attracting investment and building innovation. It's an ecosystem that we're looking for.

When we created CCRM in 2011 as a CECR, ecosystem building was the mandate. This is in the area of cell and gene therapy and advanced therapies. We put together specialized teams—academic, industry and investor networks—and specialized infrastructure to generate health and economic benefits from our strength in this field of research in the country. The challenge was that great research was happening in the country, but all of the companies were going to Boston.

The strategy was to create stickiness in an ecosystem. That was done in three ways.

The first way was to change how companies were being created, not just to rely on conventional tech transfer but to create a market-driven venture studio to create companies in a much more efficient and accelerated fashion.

The second way was to leverage our deep expertise in our team of about 300 people to invest in the early stages and to catalyze outside investment.

The third way was to build manufacturing expertise, which is where OmniaBio, the CDMO, was spun out from. That started the manufacturing capability by attracting GE HealthCare and building technology platforms. It then resulted in a partnership with a local hospital to do clinical-phase manufacturing and ultimately, on the back of generating revenue, with OmniaBio, which now has commercial manufacturing in Hamilton, Ontario.

This model of stickiness is now in demand all around the world. We're monetizing that by creating hubs around the world and by extending Canadian leadership in this area.

Our success is 300 employees, but 700 individuals have been trained. Many of them are entrepreneurs of companies, leveraging \$30 million of government funding into \$400 million and not relying on government funding anymore. There were about 22 companies created, which raised \$1.5 billion and built significant manufacturing infrastructure.

These are some ideas for the committee to think about.

Continue to support grants that link together industry and academia to attract and connect industry to the expertise in our universities, which is where much IP is being generated.

There are many public-private partnerships out there, like the CCRM, which have shown that they are sustainable and that they can leverage funding. They can become sustainable and can engage the networks in the private sectors we are looking to attract.

Leverage the SR and ED program. The SR and ED program in the early stage along with Canadian-controlled private corporations, early-stage companies, get a massive benefit. Extending that benefit to foreign invested companies that have all of their activity in Canada, like OmniaBio, should be an option. If those companies are doing clinical trials in Canada or doing their manufacturing in Canada, that benefit—not just a tax credit but also a tax refund—should be extended. OmniaBio is a great example of that.

• (1810)

The budget talked about putting more money into venture capital and a focus on emerging funds. In the life science sector, we haven't had a new emerging fund in 30 years. We truly need to create emerging funds and we need to allow entities like these public-private partnerships to expand their investment activity, as has happened at CCRM, where about \$10 million of our investment in early-stage companies has resulted in \$1.5 billion of attracted capital. We need to train institutions to be emerging funds and to then support those emerging funds in earnest.

The final thing I would offer to the committee is that we create prominent, renowned academic positions. We should create something like a post-doc in technological entrepreneurship and celebrate that. Many of our Ph.D. graduates are entrepreneurs, and we should give them funding to create a company and to be celebrated for taking that risk the same way that we would offer funding to post-docs to do extended research. We should support them to create companies.

If we leveraged our existing infrastructure and created critical mass, and if we expanded our SR and ED program to attract more foreign investment and focus on areas of interest like AI and advanced therapies and the combination of the two, and we invested in research, then we would go a long way—

The Chair: I'm sorry for interrupting, but your time is up.

Michael H. May: Thank you, Madam Chair.

The Chair: Thank you.

Now we will proceed to Dr. Murphy from Ontario Tech University.

You have five minutes, Dr. Murphy.

Steven Murphy (President and Vice-Chancellor, Ontario Tech University): Thank you, Madam Chair. I appreciate the invitation to be in front of you today.

My name is Steven Murphy, and I'm the president and vice-chancellor of Ontario Tech University in the great city of Oshawa, Ontario. There are a few points I'd like to make in front of the committee today.

I first want to acknowledge the government for the focus on priorities, more money for research, including basic research, and a focus on STEM to match the moment the nation faces. That's an important acknowledgement.

It's also important to acknowledge that while we have academic freedom, many of our universities are nimble, and we react to government, business and national priorities. I think we all know that we're in a time of historical significance for Canada. We need the academic community to be stepping up with those priorities. I'll be returning to that.

That said, we may historically have been looking at the wrong end of the commercialization continuum. As a university president, I'm probably asked daily, "Why aren't you doing more to get things out of your lab and into your organizations?" I could tell you that we're working really hard on that, and that we know we're not doing enough, but it's becoming a smaller subset of Canadian companies that are doing R and D in Canada. I know you've heard this from many witnesses.

It's really important to acknowledge that given the changes we see in our economy, with efforts in energy, building defence, manufacturing and retooling, and in steel and aluminum, to name a few, this could be an appropriate time to reboot, given the relational challenges with our neighbour to the south. Let's also not forget SMEs in this conversation.

Second, while we often focus exclusively on faculty and top talent—and that's critically important—what we don't hear a lot of is investment in commercialization officers. These officers have been the most successful at my university. These are individuals—professionals—who have spent some time in university life, but also some time in the private sector. They're a bit of a unicorn to try to find, but if you can find the right people, they are able to translate research into the commercialization opportunities that industry speaks, so that we're not speaking different languages. Let's let our researchers be researchers. They weren't trained in commercialization. Let's employ commercialization officers smartly and put money aside for that purpose.

Third, we've heard a lot about R and D tax incentives. Again, I think the budget was a good step here. I think we have to be thinking about the entire ecosystem. With less R and D happening in Canada, we have to try to make it viable. We know, for instance, that SMEs, when they're asked why they aren't using government programs, including what might be a more expansive R and D tax incentive, focus on the bureaucracy and the excessive time it takes to fill out government forms.

We really need to get a hold of how we can do things quicker and more nimbly if we indeed are going to create this new economy. It will lead to better talent retention, both in industry and in the academe-

my. Everybody wants to be working on something meaningful, and I think you'll find that the universities are really meaningful partners.

I want to conclude by talking about the important partnerships—and I think we have some great ones at Ontario Tech—that really show how commercialization can be done. We are a NATO DIANA designated facility for our ACE wind tunnel. We do an awful lot of work with the Department of Defence, but also with the burgeoning defence sector that we have to continue to build in our nation. That means we have folks coming into our wind tunnel and using our professors and our facilities to advance technological innovation, both in government and in the private sector.

We're also a designated International Atomic Energy Agency collaboration centre in nuclear energy. Darlington, of course, is in our backyard, but we work closely with OPG, Bruce Power and AtkinsRéalis, and with the entire Canadian ecosystem, to ask how we can help to get the person power and the technology to improve nuclear, whether it's at the SMR stage or the full-scale grid stage. Our partnerships across the energy sector are also a real highlight in hydrogen fuel cell battery grid and modernization.

Finally, I would be remiss if I didn't touch on AI and the focus on ethics by design that we have at Ontario Tech. This is really pulling in many organizations that think an ethics-by-design approach is not just the right way forward, in comparing what's happening in Europe to what's happening south of the border, but it's also good business. Our clients want to know their data is protected and they want to know that privacy concerns are taken care of, and we're helping to commercialize that as we're developing AI.

• (1815)

In short, to wrap up, Madam Chair, I would say that where I see the connectivity is we need to be more closely aligned around the types of people we need in our universities who bridge this gap to our industry. We also really need to have our eyes wide open to this moment so we seize it in terms of the supply chains that are being built and both the SMEs and the large-scale companies that haven't traditionally been able to scale their commercialization efforts in Canada to the degree we'd like to see. There's a huge opportunity before us.

Thank you for this opportunity.

The Chair: Thank you.

We will now proceed to our third witness.

The Canadian Shield Institute for public policy is being represented by Kaylie Tiessen.

Ms. Tiessen, you will have five minutes for your opening remarks. Please go ahead.

Kaylie Tiessen (Chief Economist, The Canadian SHIELD Institute for Public Policy):

Thank you very much.

Good evening, everyone. My name is Kaylie Tiessen. I am the chief economist at The Canadian Shield Institute. We're a new think tank focused on securing economic transformation and sovereignty for the country. It's great to be with you tonight. I'm appearing on behalf of our institute and my colleague Vass Bednar, who is tending to a family demand this evening.

Canada's research and innovation ecosystem needs a significant overhaul if we are serious about managing global risks and improving long-term economic performance. We don't lack good ideas. We've heard that already tonight from the university and industry people who've been here. We don't lack good researchers. But our domestic firms invest too little in research and development, and when they do, they often can't capture or retain the value of what they create.

Data from Statistics Canada shows that foreign-owned firms continue to outspend Canadian-owned firms on R and D across nearly every major industry. In 2023 there were three sectors where Canadian firms came out ahead. They were utilities, health care, and education, largely because those companies are Crown corporations or the broader government sector. Meanwhile, foreign firms in wholesale and retail trade spent up to 25 times more than domestic companies on R and D. Nearly 10% of all R and D spending happened in the retail and wholesale trade alone, much of it in advanced robotics, AI-driven logistics and e-commerce analytics.

When non-Canadian companies take on the bulk of the research, they also own the resulting intellectual property. Even when the initial research is funded by a Canadian institution, perhaps a university, the downstream value creation often flows abroad. This imbalance inhibits our ability to lead in advanced technologies. AI is often used as an example here. The foundational research that powered today's generative AI models was produced at Canadian universities and supported with Canadian public funds, yet the commercialization of that work and the firms that dominate the market are all headquartered elsewhere today.

Other countries have confronted similar challenges head-on. In Israel, the Israel Innovation Authority has created Yozma Fund 2.0, using public capital to de-risk private investment in technology firms. For every dollar of institutional investment, the government contributes 30¢ and waives its share of returns. It's a clear signal that innovation is a national priority. In Korea, Korea Fund of Funds uses government financing to seed early-stage venture capital, and provides credit guarantees for start-ups built on intangible assets. Sweden's Saminvest model coinvests alongside private venture funds to ensure that promising companies can scale domestically instead of being acquired prematurely.

All three countries share two things—a coherent innovation mandate and institutional vehicles that mobilize both public and private capital toward a national goal. By contrast, Canada dismantled much of its strategic policy architecture in the 1990s, when it was

assumed that the private sector would fill the gap left by, say, the Economic Council of Canada. That never really happened. Our business R and D spending has stagnated for three decades, and our share of global patents continues to fall.

Further, R and D investments are also tools of sovereignty, so we have some recommendations here. We could structure public research funding so that Canada retains IP or equity stakes in resulting technologies. We could encourage institutional investors—pension funds, insurers, foundations—to allocate more capital to domestic innovation funds. Canada also has a gap in late-stage capital. This is often where firms are bought up by foreign companies. Targeting that kind of funding can maintain Canadian ownership. We must rebuild analytical and coordination capacity, such as with a modern economic council, to track where R and D value is actually captured and shape a strategy that sits across sectors.

Finally, others appearing before the committee earlier this week have recommended a sovereign innovation asset bank. We see this as an important and useful tool to help ensure that the value created from R and D is captured in Canada and used by other Canadian firms to innovate further. We can rebuild Canada's innovation sovereignty so that when Canadians invent something extraordinary, we don't immediately surrender its value. If we can better align competition, capital and capability across that principle, Canada can stop being the R and D branch plant for the world and start being a place where ideas become enduring national assets.

We will be submitting a formal brief to the committee on all of this later. We look forward to your questions.

Thank you very much.

● (1820)

The Chair: Thank you.

Thanks to all of the witnesses for their opening remarks.

We will now proceed to our first round of questioning.

MP Ho, you have six minutes.

● (1825)

Vincent Ho (Richmond Hill South, CPC): Thank you, Madam Chair.

My set of questions will be directed to Ms. Tiessen.

We speak a lot in this committee about innovation, private sector R and D and job creation. The House of Commons was debating the issue of youth unemployment a couple of days ago. On that topic, do you think we are in a youth unemployment crisis right now, and do you think it has anything to do with a failure of government policy?

Kaylie Tiessen: I think we are in a youth unemployment crisis right now. We actually spoke about this at committee yesterday. I've been very busy the last couple of days. The solution has to be exactly what we're talking about here: creating better jobs so that there are jobs available for new graduates to move into them. That would include through innovation, creating the companies and creating the infrastructure, building, scaling companies here in Canada in order to make that happen.

Vincent Ho: With the youth unemployment crisis, do you think it has any spillover effects? Perhaps financial struggles are caused by this youth unemployment because there are no jobs, which means there are no paycheques. Do you think it has spillover effects that perhaps would cause mental health issues for youth and exacerbate the mental health challenges that are faced by young Canadians today?

Kaylie Tiessen: I am not a mental health expert, but I will say that young Canadians are struggling right now. We know that they have fewer jobs. There are fewer jobs, and there's a higher unemployment rate for young workers than there was a year ago and two years ago. They are working fewer hours. There are fewer jobs, but if they are working, they're working fewer hours. They're also, after adjusting for inflation, making less per hour than they were last year.

This is a significant challenge for young workers who are trying to launch their life. They may have just graduated from university. They want to rent an apartment. They want to move out of the home where they grew up and buy a car. I don't know, there are all sorts of things they might want to do. Actually making that happen is definitely a challenge in this environment.

Vincent Ho: The environment is the result of government failure.

Conservatives are fighting for an affordable budget for an affordable life. We hardly see any elements of that in the budget that was tabled yesterday.

Do you think that Canadians are facing an affordability crisis right now or in recent years?

Kaylie Tiessen: There's definitely an affordability crisis in this country. That's not going to surprise anyone. Everyone around your committee table knows that the crisis exists.

I think that a number of things could be done. I have written extensively about this. Unfortunately, I don't have that information with me. I prepared for a different set of questions, but I'd be happy to prepare a brief for you and to talk about some of the things that we could do, particularly in the digital economy. I'm thinking about algorithmic pricing, how that's affecting people across the income spectrum and what needs to be done to make sure that this is not eating away at the amount of money they're making. A company could be using algorithms to lower your pay, as well as using algo-

rithms to hike up your prices. That's one of many issues we could discuss, and I'd be happy to prepare a brief for you on that.

Vincent Ho: A lot of people are talking about the costly Liberal budget, which was released yesterday. Do you think there's anything missing in the 2025 budget, or are there any missed opportunities in the budget in your view in terms of innovation, anything about affordability or the youth unemployment crisis?

Kaylie Tiessen: What I wrote about yesterday was the need to make sure we are directing...that we have the systems in place for when investments are made in the multitude of things we saw yesterday. We saw that there will be investments in defence. There's a buy Canadian policy. There are investments in artificial intelligence, quantum technology and sovereign cloud. We need to make sure there's no sovereignty washing in how that money is directed, that it's directed to Canadian firms and that when the value is created from all the government spending that is going to happen—which is much needed at this time to fight the trade war and fill in the hole left by the drop in demand from the U.S. and from China—as much as possible is going directly into Canada's economy. That includes—

• (1830)

Vincent Ho: Thanks, Ms. Tiessen.

I have one minute left. I'd like to give my time to MP Mahal.

Jagsharan Singh Mahal (Edmonton Southeast, CPC): I will continue where my friend left off.

You said that you definitely agree there is an affordability crisis in this country right now. Would you agree with me, Ms. Tiessen, that given the affordability crisis and given the uncertainty of the budget, getting access to private funding, with added bureaucracy and other red tape, would pose further difficulties when it comes to youth employment and the crisis we are in right now?

Kaylie Tiessen: I don't know if I would make that direct of a connection.

I do think there are opportunities not to remove regulation but to speed it up. We heard from some other witnesses already this evening the challenges that small and medium-sized enterprises face in filling out all of the documents that are required in order to access the innovation funding. I think it was in reference to the SR and ED tax credit.

We don't necessarily want to change the rules so much as we want to change the process of how that funding is accessed. I don't have a specific recommendation on exactly how we would do that, except to say I know there is technology that could be used and other processes that could speed it up.

Even just having different—

The Chair: Thank you. I'm sorry, but the time is up.

We will now proceed to MP McKelvie. I think she's sharing her time with MP Rana.

You have six minutes between both of you.

Jennifer McKelvie: Thank you, Madam Chair.

I want to start by saying that it is a good day for science. I started this morning with the Stem Cell Network's celebration of research excellence, which celebrated their awardees.

Then, over the lunch hour, we honoured Canada's top NSERC scientists, and we recognized in Parliament, Dr. Wishart, who's the winner of the Herzberg medal, as well as the other recipients.

Now we're talking to the greatest minds in Canada. Today just can't get any better from a science perspective.

With that, I know we have Dr. Murphy here from Ontario Tech.

While you did say that you're in Oshawa, what I actually heard you say was Durham Region, which I'm a part of. My question is for you, Dr. Murphy.

You mentioned commercialization officers. Do you have them at Ontario Tech? How do you fund them, and how beneficial have they been?

Steven Murphy: Through you, Madam Chair, we do have them at Ontario Tech. They are funded out of our operating budget because there isn't currently a funding mechanism for them.

To go into a little bit of detail about them, as I said, these are individuals who have worked in the private sector. For instance, it won't surprise anybody that, coming from Oshawa, we have an automotive engineering program, so we certainly have employed one who worked heavily with GM and also spent time in the academic sector. They have an incredible ability to identify what's happening in the lab and translate that into what's happening in industry.

The challenge we face is that these individuals are desired globally, and I've lost a couple of them to big universities in the U.S. For us to keep them, we need to keep them high on the innovation agenda.

There are all sorts of opportunities. I never lose an opportunity if somebody is about to retire and they're thinking they'd still like to be involved, they can also be a great commercialization officer. There are all sorts of ways as we look at our demographic crunch that I think we could position ourselves with people who understand both how university labs and businesses work and how they need to get things out and commercialized more quickly.

It is by creating that bond that I think we can begin to crack this nut. They're certainly a component of that very difficult puzzle.

Jennifer McKelvie: I have one more thing, super quickly, and then I'll pass it off to Dr. Rana.

You gave me a tour of your AI work, and I'm looking forward to doing a tour of your nuclear work.

In terms of nuclear, you mentioned that you partner with IAEA, but I'm wondering how you work with the Pickering and Darlington power plants. They are major employers in our area.

• (1835)

Steven Murphy: Partnerships always go down to the depth and magnitude of that partnership. People have correctly stated that partners in the private sector typically come to universities first for talent. Second, they need to be pulled in to understand what you're doing there.

While all of those folks in the nuclear industry, with their expansion, are pulling on us for more nuclear engineers or engineers we re-skilled from other areas into a nuclear program, they're also looking to us for really important advancements in technology. For instance, nuclear waste can now be dealt with so much more quickly and effectively than it has been in the past, and there's so much less waste produced. That is all due to technological advancements that have happened in Canadian universities which have gotten out into them.

Without that depth and breadth of partnership, you would never get to that level of commercialization. I really credit that depth and breadth with our ability to get these things out and into important industries like nuclear.

Aslam Rana (Hamilton Centre, Lib.): Thank you, MP McKelvie, for sharing your time.

Thank you, Madam Chair.

I welcome you, Dr. Michael May, as you are from my riding of Hamilton Centre. You're doing a great job with wonderful opportunities for Hamiltonians, along with Canada's biotech sector.

I would ask you about the commercialization challenges you are facing, especially when you convert your idea from the lab to the private sector.

Michael H. May: There's a lot of talent in Canada. That's not an issue. The access to capital to scale ideas and get companies off the ground is important.

We also need a focus on ecosystem building. That doesn't mean focusing just on IP. IP is always related to people. People come up with the ideas. What we need to do in this country is create receptor capacity for the IP and the people, which creates viable companies that are well-funded and provide high-paying jobs for these innovative individuals. OmniaBio is a great example of that, because it's hard to move manufacturing. You can move IP and you can move people, but you can't really move manufacturing. In Hamilton, using AI and robotics, we will make that facility five times more productive than it was originally designed to be with just manual operations and people.

The challenge is thinking about it from an ecosystem perspective and making sure that we're thinking of receptor capacity in Canada for the talent and the IP.

Aslam Rana: You're—

The Chair: Thank you, MP Rana. Your time is up.

We will end this panel with MP Blanchette-Joncas for six minutes.

[Translation]

Maxime Blanchette-Joncas: Thank you, Madam Chair.

I'd like to welcome the witnesses, and thank them for their understanding regarding the first hour of the meeting.

Ms. Tiessen, you're right to raise the challenges that AI presents in Canada. Numerous witnesses have recently explained to the committee that innovations and data hosted on American servers are subject to American laws, even if the servers themselves are in Quebec or Canada. That means an important part of our knowledge and intellectual property is no longer under our control.

What are the real risks of this lack of intellectual sovereignty for public research and science policy in Canada?

[English]

Kaylie Tiessen: We didn't really think it was very risky at all until nine months ago. All of a sudden, we had a neighbouring president who is a lot more erratic than previous presidents. We've also had some new laws in the last six years in the United States. We are coming to understand a little more about what it means to have written the digital trade chapter in CUSMA. It means that we can't govern the American tech companies that operate in Canada in the way we'd like to. That's how we're learning about some of the risks at this time.

We saw yesterday in the budget that there is some movement toward at least building the capacity to store certain data in a sovereign way that's protected from being shared, stolen or stopped at the border and we are unable to get it back. There's a lot more work to do on this topic to understand what we need to protect in Canada with a sovereign cloud and sovereign AI, and what we might be able to store in other places.

I don't think we will quickly build the capacity that we need to build to store everything in Canada, nor would we want to. However, it is a very important conversation to have because of the risks of having that information stolen or looked at by American authorities and having it stopped at the border, if that's what someone wanted to do.

• (1840)

[Translation]

Maxime Blanchette-Joncas: Thank you.

You said red tape is making it difficult to access funding.

Do you think small and mid-size post-secondary education establishments find themselves at a disadvantage, because they have less money, less time and fewer resources to clear this administrative hurdle?

[English]

Kaylie Tiessen: I do think the application can be an administrative obstacle. My colleagues here would be able to answer this question with direct experience from having filled out these forms, but there are ways that we can reduce the red tape and reduce the friction without necessarily reducing the rules or making access to capital and R and D funding sort of laissez-faire.

We need to be thinking intentionally about how government money is invested, and having that rule is important. Then, if we can develop technology and systems that operate in a different way to help small and medium-sized universities and companies access the system in a more frictionless fashion, that would be the way to go.

[Translation]

Maxime Blanchette-Joncas: Thank you.

More and more federal innovation programs are directing research funds to the private sector, and our universities are losing out. The budget presented yesterday was clear on that.

How can public research remain independent when federal innovation policy is more and more focused on commercialization and industry partnership?

[English]

Kaylie Tiessen: That's where the sovereign innovation asset bank comes in. This is one of the ideas we had in my opening remarks. When we talk about this, we talk about a public institution with the capability to generate, assert and defend the ideas, the IP, so that we can catch up with some of the other countries. We want it to be a bank, not a vault, so that it's a public tool whereby multiple institutions can access the IP that has been created and then build on it to actually create more innovation.

It means that there would be conditional licensing or other ways to access the IP. That is one way, if we have this asset bank, and when government invests in research and development, it is required that the IP developed from that enter into this bank, so that it's benefiting all Canadians and benefiting the Canadian economy, instead of being siphoned off somewhere else. That's one important way that we could make this happen.

[Translation]

Maxime Blanchette-Joncas: Thank you.

The development of public policies on AI is a shared responsibility.

Do you think the federal government is working effectively with provinces, especially Quebec, to avoid overlap and ensure consistent governance of digital innovation?

[English]

Kaylie Tiessen: I don't have the expertise to answer that question, but we will include it in our brief if you send me that question by email. Then we can look into it and get back to you.

[Translation]

Maxime Blanchette-Joncas: Thank you.

Finally, do you wish to send us other essential information on how to improve commercialization?

[English]

The Chair: A 15-second answer, please.

Kaylie Tiessen: Thinking about this asset bank is something incredibly important in actually producing more innovation in Canada. Exactly how something gets commercialized on the other side is not something I can speak to, but if we have more companies with access to low-cost or frictionless innovations that have already taken place so that they have the freedom to operate in order to produce the additional innovation, that stays right in their companies, and that's how we get to commercializing ideas.

The Chair: Thank you.

With that, this panel comes to an end.

I want to thank the witnesses for appearing before the committee and providing their important input.

As we dealt with the committee business portion and what we needed to deal with at the beginning, this meeting comes to an end.

This meeting is adjourned.

Published under the authority of the Speaker of
the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the Copyright Act. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the Copyright Act.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the following address: <https://www.ourcommons.ca>

Publié en conformité de l'autorité
du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la Loi sur le droit d'auteur. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre des communes.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la Loi sur le droit d'auteur.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web de la Chambre des communes à l'adresse suivante :
<https://www.noscommunes.ca>