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# Standing Committee on Science and Research

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Chair: Mr. Lloyd Longfield





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• (1100)

[English]

**The Chair (Mr. Lloyd Longfield (Guelph, Lib.)):** I call the meeting to order.

This is meeting number 80 of the House of Commons Standing Committee on Science and Research. Today's meeting is taking place in a hybrid format, pursuant to the Standing Orders. We have members and witnesses appearing virtually today.

If you're on Zoom, you can choose the official language of your choice. Interpretation services are available for this meeting, so at the bottom of the screen just choose floor, English or French. If interpretation is lost, please let me know immediately and we'll suspend until interpretation services are available.

For members in person, it's a normal meeting. We ask you to address your remarks through me, and I'll recognize you by name. For those in the room, your microphone will be controlled, as normal, by the proceedings and verification officer.

Although this room is equipped with a powerful audio system, we also have to be very careful for the interpreters. We don't want our earphones near our microphones creating feedback. If feedback does occur, take your earphone out immediately. However, please, let's stay away from having feedback for the sake of those using headphones.

As a reminder, we should be speaking slowly and clearly for our interpreters. With regard to a speaking list, we'll do the best we can to maintain the order we've been given, whether you're here virtually or in person.

Pursuant to Standing Order 108(3)(i) and the motions adopted by the committee on Tuesday, January 30, and Thursday, February 15, the committee resumes its study of the distribution of federal government funding among Canada's post-secondary institutions

It's now my pleasure to welcome the witnesses.

From Thompson Rivers University, we have Dr. Shannon Wagner, vice-president of research. She is here in person. Online, from the University of Calgary, we have Dr. Ed McCauley, president and vice-chancellor, and from Western University, we have Dr. Penny Pexman, vice-president of research.

Each individual will have five minutes for opening remarks, and after that time, we'll go to questions.

We will start off with Dr. Wagner for five minutes.

**Dr. Shannon Wagner (Vice-President, Research, Thompson Rivers University):** *Weyt-kp xwexwéyep.* Shannon Wagner *ren skwekwst.*

Good morning. My name is Shannon Wagner, and I am the vice-president of research at Thompson Rivers University in Kamloops, B.C.

Today, I am here proudly representing small and mid-sized universities that are pushing the boundaries of knowledge to address regional, provincial and national research questions and priorities. We are proud of our vibrant campus life and our commitment to open learning, with nearly 29,000 students.

We are very proud to be guests on the traditional territory of the Tk'emlúps te Secwépemc for our first house in Kamloops and to T'xelec for our second house in Williams Lake, B.C. Our relationship with our host first nations guides us in our approach to all academic and research initiatives for our institution.

Our university, while deeply committed to teaching and learning, has carved a niche in research creation and dissemination. Now recognized among the top 50 research universities in Canada, TRU has shown notable growth and is second in our tier in research income. Our strategic research plan addresses key challenge areas that inform academic planning, which guides undergraduate, graduate and faculty education and research.

A flagship initiative at TRU is addressing the urgent need for research and education on wildfires. The establishment of the Institute for Wildfire Science, Adaptation and Resiliency, under the scientific leadership of world-renowned wildfire researcher Dr. Mike Flannigan, marked a significant step toward better understanding and managing the effects of wildfires. TRU and the Province of British Columbia have partnered in a first-of-its-kind initiative to create an ecosystem for wildfire studies, which includes a state-of-the-art building that will house all aspects of wildfires, from basic training through to advanced research, so that research-informed training is an expectation rather than a goal.

Equally important is our knowledge makers program, which empowers indigenous students to engage with and contribute to academic scholarship, offering them a platform to be heard and recognized on an international stage. Collaboration with the UN Food and Agriculture Organization showcased the power of indigenous knowledge in addressing global challenges like food security, further highlighting the impactful work done by our students and faculty.

These initiatives demonstrate the critical role small and mid-sized universities like TRU play in making a difference regionally, nationally and globally. The contribution of institutions like ours drives forward innovation, understanding and change. To support this ongoing and valuable work, beyond our endorsement of the ACCRU's recommendations, I propose several enhancements that would boost the contributions of small and mid-sized research institutions.

First, rethink funding models. Refocus the merit-based funding system to prioritize the quality and impact of research proposals by democratizing access to funding, while reducing emphasis on an applicant's previous research success. Perhaps this could also be accomplished by creating funding calls, beyond special calls for early career, targeted to those who have not been previously funded.

Second, level the research environment. Address disparities that give preference to applications from institutions where research infrastructure and ecosystems may be more plentiful, when those disparities do not present true barriers to successfully completing research.

Third, focus on regional needs. Regional needs and the unique strengths included in the relationships with community are not always the easiest factors to account for in existing funding calls. Valuing the unique strengths and relationships that researchers and institutions have with their communities will supercharge regional research ecosystems.

Fourth and finally, promote collaboration. Encourage and facilitate interinstitutional partnerships to tackle national and global challenges. Programs like the recent NSERC Lab2Market, which required interinstitutional partners for eligibility, are excellent models for how to bring together post-secondaries across Canada.

Thank you very much for the opportunity to present this morning. I look forward to your questions.

• (1105)

**The Chair:** Thank you very much, Dr. Wagner. You were right on time.

Now we'll go to Dr. Ed McCauley, president and vice-chancellor of the University of Calgary.

Welcome. You have five minutes, please.

**Dr. Edward McCauley (President and Vice-Chancellor, University of Calgary):** Good morning from sunny Calgary and the traditional territory of the people of the Treaty 7 region.

We're home to one of Canada's research-intensive universities. Since 2011, the University of Calgary has been intentionally growing its research capacity by focusing on impactful solutions that are

beneficial to Canadians. By 2021, we had become the youngest institution on Canada's top-five list of research universities, and we have one of the fastest rates of growth in research funding, which ranks among those of much larger, more established institutions. Our research community consistently demonstrates excellence and transdisciplinary collaboration, which are among the reasons our external research funding continues to grow.

For many years, the research performed at the University of Calgary and our sister institutions has made Canada more prosperous and healthier. We have done so in partnership with the federal government, which leverages further investment and helps us attract talent to solve some of Canada's pressing problems.

A good example is One Child Every Child, a Canada-first research excellence program. At \$125 million, it's one of the largest federal research grants to a university in western Canada. We have leveraged this funding to attract other partners to build a \$268-million research and innovation ecosystem with our community and industry that will dramatically improve health outcomes for children and youth across the country.

We are grateful for the support of the federal government, as it creates leveraging opportunities to accomplish important shared goals.

Other players also recognize the economic, social and health benefits of research. Last year, the University of Calgary had \$545 million in externally sponsored research. More than one-third of that came from industry and non-profit organizations. There is broad relevance and broad benefit to the research we perform. It advances discovery. It generates economic activity. It creates jobs. It supports existing industries, and it helps create those of tomorrow.

Federal funding plays an essential role. It supports talent and the creation of new ideas for the benefit of society. However, funding levels are eroding. Since 2020, federal funding has fallen in real terms by 19%. At the same time, our competitors are increasing their funding. The stakes are global.

We need to increase research funding to attract and retain talent, create new ideas and grow enterprises. The top economies in the world are doing just that. We also need to maintain a merit-based allocation of that funding based on rigorous, independent review. Canada's current system is considered an international best practice. While it is true that U15 institutions like the University of Calgary do receive the largest amount of this funding, we also receive most of industry's funding—75%, to be exact. A strong innovation and start-up ecosystem has broad spillover benefits when university research is mobilized towards innovation.

At the University of Calgary, we have activated several commercialization pathways, including the Hunter hub for entrepreneurial thinking, mentoring programs for innovation training, a set of ever-greening, philanthropically driven venture funds, and several sectoral innovation hubs. For the third consecutive year, the University of Calgary is the top start-up company creator among Canadian research institutions. Our ecosystem is working to mobilize research.

U15 institutions are the anchors of Canada's research ecosystem, but we are not silos. We routinely collaborate with other institutions. Just last week, the University of Calgary and University of Alberta partnered with the University of Lethbridge and Northwestern Polytechnic in Grande Prairie to expand rural medical training. We have many joint ventures with the Southern Alberta Institute of Technology, a polytechnic in Calgary, with Mount Royal University and with other post-secondary institutions across the country.

Increased federal funding will help to promote those collaborations by supporting scholars, and, through these partnerships and collaborations, it will help smaller institutions grow, just as the University of Calgary has grown. The merit- and excellence-based funding model is key to this success. It is a proven winner and is the envy of other countries.

The core problem with Canada's research funding model is not how the research funding is allocated, but that the funding is falling in actual terms and diminishing our capacity as a nation to conduct impactful research for the benefit of Canadians.

Thank you.

• (1110)

**The Chair:** Thank you, Dr. McCauley.

For the final five-minute presentation, we'll hear from Dr. Pexman from Western University.

**Dr. Penny Pexman (Vice-President, Research, Western University):** Thank you.

Hello, everyone. Thank you for inviting us to participate in today's discussion.

My name is Penny Pexman, and I am the vice-president of research at Western University. In my remarks today, I will share some insights into the exciting work led by Western researchers with federal grant funding and will echo calls for further investments to strengthen the talent pipeline and catalyze Canadian research and innovation.

At Western, we provide more than 40,000 students with an exemplary learning experience that engages and challenges them to

meet ever higher standards in the classroom and beyond. This experience benefits tremendously from having opportunities to interact with other top minds and access unique and leading research facilities. It is one way we develop leaders, thinkers and entrepreneurs who are able to navigate the complexities of our world and solve some of its biggest challenges.

We are proud to be located in London, the geographic centre of southwestern Ontario. Our campus is enriched by students, trainees and faculty from across the region and by numerous local partnerships with hospitals, industry, not-for-profits, indigenous communities and other organizations.

As a member of the U15 group of Canada's leading research-intensive universities, Western plays a vital role in advancing knowledge, driving innovation and developing next-generation discoveries that improve local and global health, economies, culture and societies.

It was in London, for example, that Western professor Dr. Ivan Smith introduced cobalt radiation therapy at our affiliated hospitals, doubling the survival rate for early stage cervical cancer to 60% and benefiting tens of millions of cancer patients. It was also where Dr. Fred Possmayer discovered a method of extracting and purifying natural surfactant from a cow's lung to help premature babies breathe, saving millions of lives worldwide.

Western is also considered the birthplace of the modern practice of wind engineering. Built in the 1960s, the first-of-its-kind boundary layer wind tunnel laboratory has been used to test many of the world's most significant structures, including the CN Tower, the Confederation Bridge and, more recently, the Burj Khalifa, the world's tallest structure.

Subsequent government investments have since allowed Western to establish an unparalleled cluster of unique wind research facilities and programs that today are helping develop building codes, supporting the construction industry, understanding our environment and keeping buildings and their occupants safe. It takes time and sustained investments to develop research strengths at this scale.

While excellence is rooted in our history, Western continues to pursue and lead partnerships aimed at advancing next-generation discoveries that improve global health, economies, culture and societies. For example, Western has recently launched a nuclear hub that leverages our expertise and infrastructure to strengthen partnerships with industry, hospitals, academia and indigenous partners. We will co-develop a pan-Canadian strategy that ensures the country remains a leader in nuclear research, innovation and training and continues to deliver real solutions that address decarbonization and advance life-saving medicine.

Many other research efforts include partnerships with small to medium-sized institutions across the country, including a partnership with Capilano and Thompson Rivers universities that provides better training to early childhood educators. Another, with Simon Fraser, Dalhousie and Memorial, is preparing primary care providers for future pandemics. Closer to home, we're working with Windsor on initiatives related to composite materials and technologies.

These are just a few examples. As we say at Western, impact takes many forms, from individual scholars creating and promoting knowledge to collaborative teams developing novel technologies and solutions to grand challenges, from researchers influencing policy to artists creating culture and bringing joy to our lives, and from efforts to understand the fundamental questions that drive curiosity to knowledge that supports the development of our business, legal, health and education systems.

This is why I would echo the U15's recommendations to maintain the principle of the independent expert review process for research grant applications based on the established excellence and rigour of the federal granting councils; to invest in the core funding budgets of the federal granting councils and CFI; to increase federal funding for graduate scholarships and doctoral and post-doctoral fellowships by 50% and double the number of awards; and to implement the governance advancements to the research support system proposed in the Bouchard report.

We encourage the federal government to make a major investment in the federal research ecosystem to support research at all Canadian institutions and ultimately benefit communities like ours in London and across Canada.

• (1115)

**The Chair:** That's terrific.

Thank you to you all for being right on time with your presentations and for some great information to start our study.

Thank you to Mr. Blanchette-Joncas for bringing this forward as a motion and for helping the committee prepare for today's work.

We'll start off our six-minute rounds of questions with Michelle Rempel Garner from the Conservative Party.

**Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC):** Thank you, Chair.

I'll direct my questions to Dr. McCauley.

The University of Calgary has become a top-five research-intensive university. Hearty congratulations. That is a higher rank than

many larger central Canadian universities enjoy. The University of Calgary has done this even though it doesn't have the geographic proximity that some of these other institutions have to the central Canadian business cores or even access to the lobbying federal government folks involved in the research funding community.

I take from this that federal research funding is very important to the University of Calgary, but would you attribute part of your institution's success to your management of strategic objectives like a diversified portfolio of funding—that is, industrial funding, philanthropy and mixed land use—in order to leverage the impact of federal research funding?

**Dr. Edward McCauley:** A few years ago as part of our strategy, we challenged the University of Calgary to combine our expertise from across all our different disciplines to tackle some of the biggest problems that Canada, Alberta and Calgary faced. We recognized that there was no one funding source that could do that.

Working with the community, we mobilized resources and mobilized investment around excellence in particular areas, while taking care to ensure that we were attracting talent from around the world to help us provide solutions. We then partnered with our communities, which is very—

• (1120)

**Hon. Michelle Rempel Garner:** You are my former boss, so I still feel awkward cutting you off, but I have only six minutes. I'll try to behave.

Can I take a “yes” from that?

**Dr. Edward McCauley:** Yes.

**Hon. Michelle Rempel Garner:** Okay. That's excellent.

We're looking for recommendations. Would you recommend that the federal government encourage research institutions that apply for federal research funding to diversify their portfolios in a manner similar to you in order to leverage research funding and get outcomes such as skilled workers, intellectual property commercialization, etc.?

**Dr. Edward McCauley:** Yes. Our scholars do that. Our scholars recognize that we need diverse funding sources to solve problems. Putting highly qualified personnel around you is really key, and it's part of our review process for grants that have come forward from the federal level and from other jurisdictions.

The training of highly qualified personnel is really important for producing new talent and new ideas.

**Hon. Michelle Rempel Garner:** We've started to hear a lot about the concept of focusing on research excellence and merit as opposed to, let's say, another model that's based just on regional allocation. If we're going to define that, would you characterize outcomes, such as the training of skilled workers, knowledge translation and commercialization of intellectual property within Canada, as components the federal government should be classifying as research excellence or merit when looking at the allocation of research funding?

**Dr. Edward McCauley:** Yes, those are some of the key components. The real proof is the demonstration of impactful research and knowledge mobilization. We have big problems to solve, and institutions across Canada pull together to actually do that.

Those are some of the components, but there are others, to make sure we're creating what are vibrant local or regional ecosystems and to ensure the talent we produce actually has the ability to grow and promote prosperity.

**Hon. Michelle Rempel Garner:** If we look at what would be established as "research excellence" and at the quantitative ways of evaluating funding applications, the list of things you talked about should be given consideration.

**Dr. Edward McCauley:** Yes. It's part of that consideration, but the key thing to remember is that research excellence is actually defined on a global scale. It defies borders.

**Hon. Michelle Rempel Garner:** That's a great point.

**Dr. Edward McCauley:** It's great ideas that can improve the world around us, and that world is very large. It's not restricted to just Canada.

**Hon. Michelle Rempel Garner:** One of the things I'm really proud of, being a University of Calgary staff alumni, is that the University of Calgary, particularly over the last 20 years, has really leveraged federal funds into more investments back into the institution, more investments back into research. In terms of a recommendation for this committee, would you say that the federal funding models for research should include the ability to leverage federal research funds to attract more funds for those research programs?

**Dr. Edward McCauley:** We have to have a clear level of funding to promote excellence, to promote talent and to promote discovery. We need to be able to generate those ideas. We also then need to look at programs in which we can combine resources to tackle some bigger problems. However, individual scholarship and the support of individual scholars are key. We can then mobilize that together to solve some of the bigger problems that require leveraging.

**Hon. Michelle Rempel Garner:** What I'm getting at here is that there has to be a demonstrable value-for-money proposition for the Canadian taxpayer when we're doing this. I understand that basic research is important. It might not necessarily result in something

right away, but we have to show that there is translation into the Canadian economy.

Within that broader set of metrics we talked about, should those sorts of things be included in the allocation of research funding, as opposed to non-defined metrics? Do you think that would get more public buy-in for these types of expenditures?

**The Chair:** You have 30 seconds.

**Dr. Edward McCauley:** I think it would help. We already do that, and the granting council presidents would probably be better able to speak to that and to what we incorporate in all of our applications. However, we have to create new knowledge and then we have to mobilize it. We need all sorts of vehicles to make that happen along the way. Leveraging and gathering resources from other areas will be an important part of that mobilization, but the mobilization is important for Canada. We have to tell that story.

**Hon. Michelle Rempel Garner:** Thank you.

**The Chair:** Thank you very much for a great round of questions.

Now we'll move to Arielle Kayabaga from the Liberals for six minutes.

• (1125)

**Ms. Arielle Kayabaga (London West, Lib.):** Thank you, Chair.

I want to welcome our witnesses to this very important study and give a personal shout-out to Western University in London.

I am very happy to have you join us to help us understand a bit more about research, especially with the lens of southwestern Ontario, Western being one of the U15 universities. There's also the collaboration you have within the region.

Welcome to the committee. I'll get right to it.

As I understand, funding is allocated to universities through a quota. Could you share with the committee a bit more about what the allocation is per university and how you understand it is decided? For example, is it by student population, amount of published research, etc., or is there any other factor you may consider to be a criterion that allows you to get that funding?

**Dr. Penny Pexman:** Arielle, is this for me?

**Ms. Arielle Kayabaga:** Yes. I'm sorry.

**Dr. Penny Pexman:** That's okay.

Regarding funding, "quota" is probably not quite the right term. There is a peer-reviewed funding competition. All scholars submit applications. There are panels put together of researchers who have content matter expertise. Those researchers are from small, medium-size and large institutions. International scholars are invited to be part of those panels. There are also members of industry and organizations on those panels. They decide which research looks the most promising and is most deserving of funding.

That's how decisions are made about the funding flows. How many students we have at Western doesn't determine how many federal grant funding dollars we get.

**Ms. Arielle Kayabaga:** How does the institution help researchers complete administrative work related to a funding application, and to what extent does this red tape impact the university's capacity to do research? What can the federal government do to help the process be better for the granting agencies in order to ease the burden?

Maybe Mr. McCauley can answer the same questions as well. I'll hear from you, then from Mr. McCauley.

**Dr. Penny Pexman:** There is a considerable administrative burden and it is not getting easier to apply for grant funding. Part of that is because we want to do better and better research, and there are more and more elements we need to consider as we do that work. Largely, what the vice-president of the research office does at an institution is to support researchers in applying for those grants, meeting the expectations of the grant funding programs and ensuring good applications go out the door. I think it's a challenge for every institution to mount that kind of support.

**Dr. Edward McCauley:** What all of our institutions try to do, both small and large, is give the scholars as much time as possible to create new ideas and then to create new proposals. Many of us work in the background to try to ensure effective and efficient administration of those grant proposals, including by encouraging peer review within our institution and among other institutions—even before the proposal goes to the grant council—because that improves proposals and leads to success.

However, this is a significant burden. Universities across the country collaborate in that burden with joint proposals. Large institutions help out smaller institutions given their capacity because we all want success.

**Ms. Arielle Kayabaga:** Mr. McCauley, could I extend to you the same question that I asked earlier? What are your views around the criteria used to allocate funding? Would you say they are similar to what Ms. Pexman said, or are there divergent views?

**Dr. Edward McCauley:** I agree with Dr. Pexman.

Quotas are not the way to look at it. It's a merit-based program or a variety of different programs that individuals, collectives of individuals, collaboratives and partners can apply for. The key thing there is the piece on excellence, on merit-based approaches to evaluating those proposals, and having a clear set of guidelines on submission.

I've been very fortunate to live in different jurisdictions and have grants from different organizations around the world. The support staff at the tri-councils and CFI do an amazing job at ensuring there's no bias in those proposal evaluations. They're just incredible.

**Ms. Arielle Kayabaga:** I will go Dr. Wagner. If any of the institutions here feel compelled to answer, they can also answer.

You talked about indigenous research. I'm interested to know about research funding for specific minority groups, whether they're indigenous communities, francophones or other groups that are perceived to have a minority language or be in a minority com-

munity. Can you touch a little on that and the challenges that you're facing in supporting researchers of those minority groups?

• (1130)

**The Chair:** You have 30 seconds.

**Dr. Shannon Wagner:** Let me start by saying that I want to echo and acknowledge the points put forward by my colleagues Dr. Pexman and Dr. McCauley. It's really a process of funding the system and ensuring that we're able to provide funding across all of the different priorities, including faculty research, student research and research in indigenous and other specific priority areas.

Thinking about moving forward with respect to merit-based systems and excellence is really about considering what components make up a merit-based and excellence system. That feeds into your question around how we support specific priorities, like indigenous research.

As Dr. McCauley has alluded to, the tri-council has been fantastic about providing specific calls, for example, that support that kind of research and research into specific priorities—

**The Chair:** We're over time.

Thank you for getting those thoughts in. Maybe we can work more into other questions.

Now we'll go to Mr. Blanchette-Joncas for six minutes.

[*Translation*]

**Mr. Maxime Blanchette-Joncas (Rimouski-Neigette—Témiscouata—Les Basques, BQ):** Thank you, Mr. Chair.

I would like to welcome the witnesses who have joined us today for this important study.

Ms. Wagner, from Thompson Rivers University, your colleague from the University of Calgary said earlier that the issue wasn't necessarily the distribution of funding, but rather underfunding. In our latest study, we learned that 79% of funding goes to Canada's 15 largest universities. I would like to hear your thoughts on this information.

As a representative of a university that isn't one of the 15 largest in Canada, do you think that equity and access to funding for small and medium-sized universities constitute a real issue?

[*English*]

**Dr. Shannon Wagner:** This goes back to our opening remarks, including those made by Dr. McCauley and the five points that were brought up by Dr. Pexman around increasing the funding going into the system.

Right now, there's not enough to go around, so we end up seeing competition between institutions—things we don't want to see. We want to see collaboration between institutions. We want to see the opportunities that Dr. McCauley was talking about earlier. We want to see teams working together. We want to see interinstitutional faculty membership coming together to solve some of most pressing problems.

In order to do that, we have to have opportunities for students and faculty researchers to access granting funds at the federal level. It's really a process of lifting all boats. It's not about providing to one versus the other. It's about providing to the system so that we can work together to do really excellent work and solve the nation's problems.

[Translation]

**Mr. Maxime Blanchette-Joncas:** Thank you for this information.

Your university has more students than some of the 15 largest universities in Canada. However, you aren't part of this group when it comes to research intensity or access to funding. Given the significant and objective finding that your university has more students enrolled than other institutions, but receives less funding, how do you feel about the current structure of research funding in Canada?

[English]

**Dr. Shannon Wagner:** On this question, I would reflect back on Dr. Pexman's comments about how there is no real quota with respect to tri-council funding. It's not based on the number of students that we have as an institution. It's really based on the applications that are put forward by the researchers within our institutions. It's about providing a supportive system where our faculty researchers can put forward the highest quality applications to the tri-council to be funded and do work. It isn't reflected in the number of students. It's reflected in the quality of the applications and the research support.

As Dr. Pexman indicated, the VPR's office is often research services support. That's our reason for being: to support faculty in doing really excellent applications. It's really a reflection of the great faculty work and the support that can be provided through the research services within the institution. That leads to the success of the applications.

• (1135)

[Translation]

**Mr. Maxime Blanchette-Joncas:** Thank you, Ms. Wagner. I completely agree with you that merit should be recognized and rewarded. However, when we look at, for example, the Canada Research Chairs' allocation process, we see that the process is based on an analysis of the research funding awarded to universities over the past three fiscal years. This allocation process is reviewed every five years. As a result, a university without a significant research history can't access funding.

I would like to hear your thoughts on this. How do small and medium-sized universities that don't have an exemplary funding history manage to obtain funding in order to make their mark and compete with the large universities, in particular the 15 largest uni-

versities in Canada, which receive 79% of all research funding in the country?

[English]

**Dr. Shannon Wagner:** That's an excellent question. It really goes back to my opening remarks.

There are opportunities for us to increase the system and create specific programs that might benefit smaller institutions where it is a little harder to break in. Smaller or mid-size institutions like ours are oftentimes looking at recruitment from, for example, mid-career researchers or individuals who are coming in from practice—individuals with long histories in health, for example, who become health researchers. They don't necessarily have significant funding successes from their previous experiences to build upon.

We're thinking about ways we can bring into the system researchers who are new to the system or who have not yet had an experience in the system. We don't want to make the assumption that just because you haven't had an opportunity to access the system, you don't have a great idea. We're trying to be creative about how to provide avenues for faculty researchers and great minds to enter the system in new ways that we haven't thought of before.

[Translation]

**Mr. Maxime Blanchette-Joncas:** Thank you.

I would like to talk about a situation that came up at our last meeting on this topic. Some people, including Philip Landon, said—

[English]

**The Chair:** I'm sorry. We'll have to pause now because we are at time, but I know you'll get an opportunity in the next round.

Mr. Boulerice, welcome. It's good to have you as part of our committee today subbing for Mr. Cannings.

You have six minutes, please.

[Translation]

**Mr. Alexandre Boulerice (Rosemont—La Petite-Patrie, NDP):** Thank you, Mr. Chair.

I'm also pleased to be here today. When my colleague, Mr. Cannings, asked for a replacement because he had other commitments, I gladly volunteered. I believe in the fundamental importance of research for the advancement of human knowledge, for economic development and for the opportunity to adopt public policies based on facts, science and research too. This also helps us with our work.

Ms. Wagner, I'll continue along the same lines as my Bloc Québécois colleague. You talked about equity in Canada's research ecosystem and about how our approach should focus on the democratization of access to funding. You spoke in particular about the possibility that a perhaps smaller institution, which has never done research in a given field or on a given topic, could also access research funding, even if it were for the first time.

It reminds me a bit of young people who want to enter the job market, but who need to already have experience, just when they're trying to enter the job market. Even without experience, they can be extremely competent and able to contribute to the company.

How should this approach work? Should funding be earmarked for these new initiatives, projects and fields of research? Should more general criteria be applied? You talked about approaching this issue creatively rather than systematically denying access to funding. I would like you to elaborate on that. How could this be done?

[English]

**Dr. Shannon Wagner:** That's an excellent question.

Lots of different opportunities could be put forward to start to address some of those pieces. Some of the ideas we've come up with to this point think about how the scoring system works within the tri-council. Is it most appropriate to put a lot of weight on, for example, previous funding success? There may be some situations when that is entirely appropriate. I'm not suggesting that's not the case.

We see opportunities for career researchers, for example, which get at exactly what you've referenced with a new employee trying to enter the workforce. You need experience to get experience. It equates to the same sort of approach.

Could we look at similar kinds of approaches for individuals who perhaps have great ideas and haven't yet been able to break into that system? Are there opportunities to create special calls or special opportunities that allow individuals who need experience to get experience and become a participant in the system?

• (1140)

[Translation]

**Mr. Alexandre Boulerice:** If you don't mind, Ms. Wagner, I'll continue with you before turning to the other important guests here, simply because your university is renowned for its forest fire research.

Last summer, we saw how badly a number of areas of the country were affected by forest fires resulting from the climate crisis and climate change. The fear is that this summer will be worse than the last. Forest fires have already started in Quebec. We also know that the snow pack in British Columbia is insufficient and that there may be an extremely dry season ahead.

How much federal funding is allocated to forest fire research? Is it enough? How could this research actually help the communities of our country protect residents from this phenomenon that, unfortunately, is likely to become worse?

[English]

**Dr. Shannon Wagner:** It's such an important topic right now federally and for the interior of B.C. in particular, which has experienced the absolutely devastating impacts of forest fires over the last couple of years. I'm really pleased to say that TRU has decided that wildfires are an absolute priority of our institution. We've partnered with the province. We're going to develop a training and education centre that will look at everything from basic training through undergraduate and graduate training to research in order to create an ecosystem of research-informed training.

As many of us know, with climate change, the adaptation training and response need to change, and we need research to do that. I think back to Dr. McCauley's comments at the beginning: Research drives society. We need research in order to really move forward on answering some of the pressing calls of our current situation.

We have definitely seen some influx of federal funds, particularly around Natural Resources Canada and the opportunities that exist through it. I think that's definitely a start.

There's a lot of work to do. I would expand it beyond wildfires to many other different types of climate disasters that we're experiencing as a country. It's a high-priority area, and it's definitely a source for investment at the federal level.

**The Chair:** You have 30 seconds, if you have a short question and short answer.

[Translation]

**Mr. Alexandre Boulerice:** I'll give these few seconds to the committee.

[English]

**The Chair:** That's great. Good-quality questions are sometimes better than quantity. Thank you very much for your questions.

Now we'll move to the second round and go to Gerald Soroka for five minutes.

**Mr. Gerald Soroka (Yellowhead, CPC):** Thank you, Mr. Chair.

Thank you to the witnesses for coming today.

Since Dr. Wagner has come here in person, I think I'll start with her.

How is TRU working to diversify its funding beyond federal support and tuition, specifically through commercial partnerships or intellectual property initiatives? Please provide examples.

**Dr. Shannon Wagner:** TRU, as I alluded to in my opening remarks, is very much a growing research institution. At this point, we've been quite successful in getting tri-council and provincial funding. We are really developing on the innovation and IP front, and we are developing our industrial partnerships.

As Dr. Pexman alluded to, the VPR's office is often the primary source for research support. That is also the case at TRU. We're making significant investments in things like industrial individuals who are responsible for specific industrial and commercial IP-related contracts, and building those relationships with industry.

In addition, we're thinking forward to building partnerships with some of the larger institutions in our province to create collaborations on some of those pieces. To fully flesh out offices of intellectual property and commercialization is a big undertaking for the smaller and mid-sized institutions; it's a big lift. It's really about looking at interinstitutional collaboration to build out our opportunities in those areas.

• (1145)

**Mr. Gerald Soroka:** What criteria do you use to prioritize research projects? Does it also include looking at a return on investment?

**Dr. Shannon Wagner:** At a smaller or mid-sized institution, we identify pillars of research priorities, similar to the larger institutions. As an institution, we will absolutely invest in those research areas. For us, it's certainly one of our research areas as well. Another one is indigenous health.

Was return on investment the other part of that question?

**Mr. Gerald Soroka:** Yes.

**Dr. Shannon Wagner:** When we think about making investments in research, we're often thinking about the capacity that's built, in particular, around tri-council funding.

One of the other members brought up, for example, the Canada research chair program. The opportunity of having a Canada research chair makes me think about Dr. Mike Flannigan and Dr. Jill Harvey, who are chairs at TRU. They help us build relationships with industry. They provide almost ambassadorships for the institution to create pathways to a return on investment for grant dollars. That's a really important piece of building research at a university.

**Mr. Gerald Soroka:** On the wildfire science that you guys have been developing there, it's great that you're attracting funding and partnerships. Is that only looking at the forests themselves or how a fire burns? Are you also looking at new technologies and planes or ways of extinguishing the fires?

**Dr. Shannon Wagner:** Absolutely, we're looking at a wide variety of areas.

We're actually thinking of it as wildfire studies. We are thinking about training, education, research and innovation. We are thinking about not only wildfire science but also community and social resilience. How does a wildfire impact a community, and how does a community respond to a wildfire? We are looking at occupational and community health around wildfires, and definitely indigenous cultural fire as well. We are looking at how all of those pieces fit into wildfire mitigation, response and prevention.

**Mr. Gerald Soroka:** Thank you for that.

Dr. Pexman, what are your main goals for Western's research and innovation over your term? How do you plan to balance traditional strengths and new research areas?

**Dr. Penny Pexman:** We have big ambitions at Western. I'm a relatively new VPR. I'm struck by the research strengths that already exist and the opportunities that exist to build on those through partnership, innovation and tech transfer.

One example of a priority is one that I mentioned in my comments, which was the nuclear hub. I like that example because it's built on discovery research in things like medical isotopes and nuclear energy, but it also involves key partnerships, both within the province and beyond, with different types of organizations. It capitalizes on a couple of federal programs that actually require matching contributions and leveraging.

One would be the NSERC alliance program. We have a number of successful NSERC alliance grants that have just come in through the nuclear hub for which there is an industry partner who wants to engage with one of our researchers. The federal funding requires a combination of federal and external funding, and those tend to build into bigger and bigger industry contracts.

The Mitacs program would be another example. There's a requirement that, in order for a student to engage with an industry partner, some money comes from Mitacs. There's also money from the industry partner. Those lead to fantastic job opportunities and larger-scale industry partnerships. We have a number of those examples right now in the nuclear hub.

**The Chair:** Thank you for the questions and great answers.

We'll move now to Ms. Lena Metlege Diab, please, for five minutes.

**Ms. Lena Metlege Diab (Halifax West, Lib.):** Thank you very much, Chair.

Thank you to our witnesses for coming.

I heard something this morning that I really wasn't expecting to hear, but it really caught my attention.

Dr. Wagner, you talked about the institute for wildfire and about understanding and managing the effects of wildfires. I think that's so important. One of my children did graduate work on wildfires in Nova Scotia at Dalhousie University. When she started, she was told that no one else had done that before. This was a number of years ago.

To come back full circle, in two weeks' time, I'm putting on a session in my community. I come from Halifax West in Nova Scotia, all the way on the other coast, where we experienced terrible wildfires last year that have left hundreds of people devastated. Many homes were burned and many people were evacuated. A number of things happened, but luckily there were no fatalities.

I'm putting on an information session on emergency preparedness on April 25. Perhaps we should talk to you afterward to see what information we can get from you.

How do you collaborate or teach to solve problems? They're not just your provincial problems or those in your own territory or even Canada. They could be international issues. How do you collaborate? How can you get more researchers, get more funding and get more people knowledgeable so that you can garner much more funding? I'm happy to hear that you've received funding from Natural Resources Canada, but perhaps you can describe that process to us. What can we do as parliamentarians to aid you with that?

• (1150)

**Dr. Shannon Wagner:** I echo the devastation of the wildfires. As you know, a number of lives were lost last year as well in the firefighter ranks. We were working directly with the B.C. Wildfire Service at the time and felt very deeply the loss of their members. That happened last summer. It's become very much an emotional topic for us at our institution, so thank you for that.

As far as our development of the Institute for Wildfire Science, Adaptation and Resiliency goes, our scientific director is Dr. Mike Flannigan. He is globally known for his expertise in wildfire research, and he is incredibly well connected with other researchers provincially, nationally and globally. While having him and the other researchers do that work and connect with other researchers, our role is to provide the assistance and support to have the researchers do the fantastic work they do and to invite other institutions and other researchers to become part of the institute.

Another big piece for us is the creation of a wildfire training and education centre, which we think is a first in the ecosystem. We are not aware of any other systems where training, education, research and innovation are coming together under one roof to do these things collectively with all of the people engaged.

The idea of that is having research-informed training and education, building that research and then informing the things that are happening on the ground. We are not interested in doing that only regionally. We really would like to see both the institute and the centre become a provincial source and absolutely a national source.

We are actively seeking any kind of collaboration that anybody would like to have with us. We are trying our very best to work with other post-secondary institutions across our province and across our nation.

**Ms. Lena Metlege Diab:** With the limited time I have left, Dr. McCauley, I have a question for you.

The U15—your university and others—does tremendous work, and you talked a lot about team-building collaboration across industry but also with other universities.

I have a U15 member in my province, Dalhousie, and I know they collaborate with the other centres, but what else can you recommend to us in terms of how we as parliamentarians and a government can help you so that all sectors and universities, regardless of their size, work together better?

**The Chair:** I'm sorry. I'm going to have to pause on that question. If there's an answer, perhaps we could have it in writing. We are at time.

We have five minutes left in this section of the meeting. We'll have two two-and-a-half-minute rounds.

For the first of those two and a half minutes, it's over to Monsieur Blanchette-Joncas.

[*Translation*]

**Mr. Maxime Blanchette-Joncas:** Thank you, Mr. Chair.

Ms. Pexman, you said earlier that the size of the organization shouldn't necessarily affect research funding. If I understand you correctly, we should be funding universities based on past innovations. Can you elaborate on this?

In my opinion, the purpose of research funding is to fund future research, not to reward discoveries. Yet this is the current model of the funding structure. In your opinion, is the current funding system appropriate and does it allow for innovation? Shouldn't there be improvements so that everyone, regardless of their location or university, can make major advances in scientific research?

• (1155)

[*English*]

**Dr. Penny Pexman:** I think the best outcomes will be derived by a system where each application is adjudicated on its merits. We consider what the research question is, how well it is being interrogated and whether we feel it is a great training opportunity. Those tend to be the questions we ask under the current federal funding programs. I think they are the right questions.

That's my opinion about how we should be making decisions about federal funding opportunities.

[*Translation*]

**Mr. Maxime Blanchette-Joncas:** Thank you for the information, Ms. Pexman.

You spoke about excellence. For some peers who sit on assessment committees, excellence depends on the source of the funding application and the research. For example, if the application came from a U15 member university, this could influence the members of the assessment committee. This is a taboo phenomenon. However, it currently plays a part in the allocation of funding for scientific research in Canada.

[*English*]

**The Chair:** You have 30 seconds.

**Dr. Penny Pexman:** The evaluation is about the researcher's capability to do the work. That is typically the criterion. The institution at which someone is employed is not a big driver of that. As we heard, there are excellent researchers working on, for instance, wildfire science at Thompson Rivers. That expertise should be valued, and it is, regardless of the institution the person comes from.

**The Chair:** That's beautiful. Thank you.

Monsieur Boulerice, you have two and a half minutes.

[*Translation*]

**Mr. Alexandre Boulerice:** Thank you, Mr. Chair.

We heard earlier that the funding from the federal government was insufficient. This creates a competitive rather than a collaborative atmosphere among institutions. Ms. Wagner also expressed concern about this issue.

Ms. Pexman and Mr. McCauley, are you seeing this in your respective areas? What are the consequences of this war of all against all to grab pieces of a pie that isn't big enough for everyone? Please be brief.

[*English*]

**Dr. Penny Pexman:** When resources are scarce, I think people will make difficult choices about where funds should be allocated. I absolutely believe Canada's competitive advantage is eroded when we don't have sufficient funding in the research funding programs.

**Dr. Edward McCauley:** As I mentioned earlier, the mobilization of knowledge creation is a global game. The world is very competitive. In order for Canada to succeed, we have to identify areas where we want to do research that is impactful and can solve problems that Canadians believe are very important for society. Forest fires is a great current-day example.

However, excellence has to be paramount and we have to be able to provide the support mechanism to back our scholars, whether undergraduate students, graduate students, post-docs or faculty members, so they can produce the best research possible given the funds we have.

[*Translation*]

**Mr. Alexandre Boulerice:** Ms. Wagner, you can share your final thoughts.

[*English*]

**Dr. Shannon Wagner:** I concur with both of my colleagues and suggest that resourcing the whole system so that it's adequately able to support the kinds of excellence and research that need to be done, across all the different groups and regions doing the research, would absolutely be the best-case scenario for all participants.

**The Chair:** Thank you all. Thank you especially to our witnesses, Dr. Shannon Wagner, Dr. Ed McCauley and Dr. Penny Pexman, for their testimony. We had excellent questions and participation as we get started on this study on the distribution of federal government funding among Canada's post-secondary institutions.

If there's any further information you'd like to provide to us, please feel very welcome to do that through our clerk.

Members on Zoom, if you could just stand by, we're going to suspend for a minute or two while we get our next panel up. They're coming from a couple of the colleges in Canada.

We'll suspend for a couple of minutes.

• (1200) \_\_\_\_\_ (Pause) \_\_\_\_\_

• (1200)

**The Chair:** Welcome to our witnesses, who have just joined us.

Pursuant to Standing Order 108(3)(i) and the motions adopted by the committee on Tuesday, January 30, and Thursday, February 15, the committee resumes its study of the distribution of federal government funding among Canada's post-secondary institutions.

It's now my pleasure to welcome Dr. Marc Nantel from Niagara College, vice-president of research, innovation and strategic enterprises, who is here in person. We also have, from Aurora College via video, Pippa Seccombe-Hett, vice-president of research.

Ms. Seccombe-Hett, you can choose the language on the bottom of your screen. I see you nodding, so you're well aware of that.

You'll each have five minutes to start.

We'll start with Dr. Nantel from Niagara College.

• (1205)

**Dr. Marc Nantel (Vice-President, Research, Innovation and Strategic Enterprises, Niagara College):** Thank you, Mr. Chair.

I'd like to thank the committee for undertaking this study and for inviting me as a witness.

As said, my name is Marc Nantel and I'm the vice-president of research, innovation and strategic enterprises at Niagara College. I have experience in research at both the university and college levels. I have a Ph.D. in plasma physics, have done research in France and in the U.S. and was an adjunct professor of physics at the University of Toronto for 10 years. I've been at Niagara College since 2011, leading its research and innovation division.

You will no doubt hear much about university research and the distribution of funding between smaller and larger universities for this study. I'm here to discuss the place of colleges within that ecosystem. Interestingly, 11 colleges get more overall research funding than the university listed at number 50 on the Canadian university research list, so several colleges do more funded research than some universities.

College research is often about the application of knowledge to solve immediate problems. It's about the companies that approach us for help. It's about developing new products, processes and services with them. It's about giving college students a richer education.

At Niagara College, we've been doing applied research with industry for more than 25 years. We are currently number one on the top-50 research college list. We focus our applied research on sectors of importance to the Niagara region, such as advanced manufacturing, agriculture and the environment; food and beverages; and business and commercialization. Typically, we require that there be a one-to-one matching of government investment in a project so that the company has skin in the game and the desire to commercialize the result, which leads to faster economic development and job creation.

Here's only one example. I can give more during the question period.

Hamill Machine is a Niagara Falls small to medium-sized enterprise that used to cater to the automotive parts industry. Niagara College helped Hamill develop a completely new product line that automates the harvesting of microgreens, speeding it up by 50 times. Their three harvester machines for cutting, washing and drying are now sold domestically and internationally under a new spinoff company, Hamill Agricultural Processing Solutions, which has grown over the past five years from zero to 20 full-time employees. Last year, it did \$3 million in sales and completed its first overseas installation in Abu Dhabi.

That's great, but Canadian colleges achieve outcomes like this for the country on less than a shoestring. I like to say that we do it on the plastic bit at the end of the shoestring. Right now, colleges receive only 2.9% of the federal funding for research.

Here's an example of how colleges lead and could do more with better funding.

Niagara College is the creator and leader of the Southern Ontario Network for Advanced Manufacturing Innovation, or SONAMI. You heard about it from Madam Johnston earlier. It brings together nine colleges and two universities. We like collaborating.

In its eight years of existence so far, SONAMI has undertaken more than 460 projects with 316 industry partners that commercialized 149 products. That's a 32% commercialization rate. It has created more than 280 jobs. Those are undercounts because of reporting. These projects were mostly funded through FedDev Ontario and also through NSERC.

This is an example of how colleges can lead strong networks that include universities, but currently, several federal funding programs supporting similar networks do not allow colleges as lead applicants. This needs to change, as do the measurements of success of such programs, which should reflect what colleges can bring to the table. If the evaluation criteria are about refereed papers instead of the number of jobs created, then college applications won't rank very well. That would be both disappointing and counterproductive if what you want is economic development through manufacturing transformation, transition to a greener economy, industry investment in technologies and increased productivity.

Here's another example of what colleges could do with more than 2.9% of the federal research funding. We don't keep the intellectual property generated through these collaborative projects generally. We give it to the industry partner. Companies come to us for solutions, but they don't always know what to do and how to get the

best benefit for the IP. Colleges could help them understand what they have and help them commercialize it. Right now, though, colleges and their offices of research are underfunded and do not have the bandwidth or resources to take their industry partners on this complex journey.

In conclusion, I'm happy that colleges are included in this study. I hope that I have demonstrated the important role that they can play in Canada's research ecosystem, especially as it touches industry relevance, economic development and job creation. We can do so much more if we can be recognized as such and enabled to realize our full potential for Canada's economy of the future.

Thank you very much.

• (1210)

Thank you very much.

**The Chair:** That's terrific. Thank you. It's great to hear SONAMI getting a couple of shout-outs. Kithio Mwanzia is the network manager there. He replaced me as president of the chamber of commerce in Guelph when I was elected. We're all connected in some way or another.

We will now go to our next witness, Pippa Seccombe-Hett, from Aurora College.

You have five minutes.

**Ms. Pippa Seccombe-Hett (Vice-President, Research, Aurora College):** Thank you, Mr. Chair, for the opportunity to speak with the committee today.

I would like to acknowledge that I am here speaking on behalf of the president of Aurora College, Dr. Glenda Vardy Dell. She was unable to make it today and asked me to speak on her behalf since we recognize that it is critical that the voices of smaller and remote post-secondary institutions participate in discussions surrounding the distribution of research funding.

I want to share some information about our college to provide context for our institution and our position with regard to the distribution of funds.

Aurora College is the public community college of the Northwest Territories. It has three main campuses—in Inuvik, Fort Smith and Yellowknife—with research staff located in each of these campuses. We operate the Western Arctic Research Centre in Inuvik, which is the logistics hub for research in Canada's western Arctic. It serves the college, the community and hundreds of external researchers every year from regional, national and international origins.

The north has always generated a tremendous amount of research interest. However, the science and research have historically been led by researchers located outside of the region. These researchers are located primarily in federal government departments and in universities across southern Canada. Increasingly, we have to note, we are seeing large international teams working in our area as well. All of this research has made a tremendous contribution to science. It is valuable nationally, regionally and internationally, but there has always been a gap between the big-picture science and regional research concerns and priorities.

When I first began working in the territories 25 years ago, we spent much time advocating for the priorities of northern jurisdictions and highlighting them to federal research funders to encourage work on these topics since the funds were inaccessible to residents in the territories. This prevented the region from maintaining research capacity in the north, conducting research on local priorities or directing the use of any research funds, which created a great sense of inequity.

Aurora College started conducting a small amount of research in 1995, when the college was created and merged with the Science Institute of the Northwest Territories in advance of the separation and creation of Nunavut. This positioned a small amount of capacity in Aurora College to focus on regional applied research programs, and that's since grown.

Aurora College became eligible to access tri-agency funding in 2014 and, over the last decade, has really started to grow and realize the aspirations of developing applied, community-partnered research. Over this decade, we have grown from 10 to 45 research staff and developed applied research programs with community partners, always partnering with and creating strong benefits for northern communities. It is also important to highlight that we have been able to anchor access to indirect cost funding for our regional indigenous governments and not-for-profit organizations in order to contribute to creating a regional applied research ecosystem.

Throughout this last decade, we have also increased our collaborative engagements with research from universities that have active northern research programs. Doing this has allowed us access to new funds, mentorships and partnerships, but it has also helped us understand how much more indirect cost funding is provided to universities through the research support fund.

Aurora College is currently in the process of transforming from a college to a polytechnic university. Part of this vision is really about building and expanding on this applied research focus. Getting access to national research funds has been a game-changer for us. It has positioned the college to be in a meaningful role for the region and opened avenues for funds, equipment and expertise to focus on and partner with northern and community organizations to address local challenges. The NSERC college and community innovation program has been critical to our growth and success in developing research programs that bring impact and benefit to the communities we serve.

Given our position and our recent experiences with national research funding, we would like to highlight and recommend continued and increased funding in the college and community innovation program. This anchors the applied, community-partnered research

where we have demonstrated success and impact and are positioned to grow.

We would also highlight access to research support funds to help offset indirect costs. Providing colleges and institutes with equal access to these would create significant capacity in our institutions to meet the evolving research requirements of data security, research data management, etc.—the many changing requirements.

We also suggest potentially targeting funds that build bridges between universities and colleges to increase the impact of research and knowledge at the community level.

Of course, being northerners, we want to highlight that there is a northern supplement for university programs that is not available for the northern colleges or polytechnics. This creates an additional barrier for our ability to conduct research.

• (1215)

I would like to close by reiterating the importance of national research funding for supporting applied northern research within colleges. It's critical that opportunities remain for remote, northern and indigenous people to access national research funds and participate in the applied northern research ecosystem.

I'd like to say thank you for allowing me to speak with you today. I welcome all questions to help provide the small institution perspective in support of the work of this committee.

**The Chair:** That's great. Thank you very much for your testimony.

Now we'll go to our first six-minute questioner, Corey Tochor from the Conservatives.

**Mr. Corey Tochor (Saskatoon—University, CPC):** Thank you so much.

Thank you to our witnesses.

I'm going to start with the south—Niagara.

Are small colleges receiving sufficient funds to support the federal government in managing compliance with the new federal policies on sensitive research partnerships with entities such as the PRC or international actors? Do you have the funds available to be compliant?

**Dr. Marc Nantel:** No.

I'll go back to my colleague Pippa at Aurora. One thing that colleges are missing is resources to do the stuff that research needs to get done on top of research: project management, data gathering, research data management and data security. We have the international security aspects to look after—lots of reporting—and that is not generally supported very strongly in the college grants. Universities have—

**Mr. Corey Tochor:** Do you know of anyone from your organization who has turned down new research projects because they are associated with the PRC or foreign actors on that list?

**Dr. Marc Nantel:** No.

Listen, I don't want to speak for every college in Canada, but most of our research is with local small and medium-sized enterprises, and very few of them are multinationals with ties in several countries, including those that are of concern.

**Mr. Corey Tochor:** I'd just like a little clarification. We're talking about the different percentages. On average, 48% of the funding received for supported university research comes from the federal government. How much of the federal funding does your college receive for research as a percentage?

**Dr. Marc Nantel:** I'd say the majority of the cash funding we get is from the federal government. Some colleges lean more provincially, but to be fair, there's not generally much—in the province of Ontario, anyway—towards research funding for colleges. The program named by Pippa, the NSERC CCI program, is a big source.

We are also blessed to be funded by a regional development agency, FedDev Ontario, which is federal but regionally federal, if you want. I'd say it's 90% of what we do, but it's still a small number and that's part of the problem.

**Mr. Corey Tochor:** Absolutely.

Now, switching to the north, to Aurora, thank you so much for Zooming in today.

I'll ask you the same question. Do you have the funds required to protect the research and our country and implement the policies that have been rolled out by the federal government?

**Ms. Pippa Seccombe-Hett:** Honestly, it's a stretch. We don't receive very much funding to support that work, and it's off the sides of people's desks that we manage to do it. Because we have to, we just find ways to pull together as needed within our institution to do it, but do we have the base funding to meet it easily? No.

**Mr. Corey Tochor:** On the research you're doing, especially the research that is done specifically on the lives of the people in the north, have you had any international groups or companies that want to do research in the north that you had questions about?

• (1220)

**Ms. Pippa Seccombe-Hett:** There are lots of people from many countries that conduct research in our region. As to “questions”, I'm not sure what you mean. We do have a regional licensing process that manages and forces adherence on basic research requirements that would be expected within Canadian research—

**Mr. Corey Tochor:** Have you turned down any funds from foreign actors because of this policy?

**Ms. Pippa Seccombe-Hett:** No.

**Mr. Corey Tochor:** Okay.

Just because we have you for the second round of questions—I have some additional ones once I'm done with these—can you tell us a bit more about Aurora's life in the north? How do you guys heat your buildings up there? What sort of energy source is there?

**Ms. Pippa Seccombe-Hett:** It depends on the community. It's natural gas in some communities, and in others it's oil. There is some hydro, but largely it's gas and oil.

**Mr. Corey Tochor:** Could you describe the effects of climate change on your life in the north and on the facilities?

**Ms. Pippa Seccombe-Hett:** Climate change is impacting everything in the north. The region where our research centre is located, the Western Arctic Research Centre, and where the Tuktoyaktuk coastline is shows that climate change is three to four times what you're seeing in southern Canada, and all of our infrastructure is on permafrost. The melting permafrost and the accelerated changes in temperature are having very significant impacts. Climate change impacts every infrastructure project and every building and causes coastal erosion. It is a consideration for everything we do.

**Mr. Corey Tochor:** Thank you.

Just switching to the south, I have the same question. How have the effects of climate change affected the state of operations on your campus, if they have?

**Dr. Marc Nantel:** Whenever we have a building or re-renoate a building, we choose technologies that are—

**Mr. Corey Tochor:** I'm not talking about the mitigation of the effects of climate change, but actual climate change.

**Dr. Marc Nantel:** I'm in a wine-producing region, and it affects the types of grapes we can grow. In some cases, it affects the types of pests that come our way, which then affects the types of grapes we can grow.

Some pests used to die in the winter and then you're okay the next spring. That doesn't happen quite as much anymore, so we get to see some of those effects, for sure.

**The Chair:** Thank you.

Now for six minutes we go to Valerie Bradford.

**Ms. Valerie Bradford (Kitchener South—Hespeler, Lib.):** Thank you so much, Mr. Chair.

Thank you to both of the witnesses today.

I was glad to hear you refer to SONAMI. Conestoga College is just a block away from my constituency office, so I'm very familiar with it. I grew up in Niagara, so I'm very familiar with Niagara. I know all the things you do. I've been to the culinary school and seen the grapes, and you have all the various kinds of liquor covered, just so everyone knows. It's a great place.

I'm also very aware of the research you've done with manufacturing. I was the chair of the manufacturing innovation network, and I'm quite aware of all the excellent collaborative, applied research that goes on with manufacturers.

Just to clarify, the purpose of this study is not to redistribute the current funding and take away from one group of post-secondaries to apply to another. In your opinion, do you think it would be better to create specific programs to support college-level research or adapt the existing fund programs, and if so, how could the existing programs be improved or adapted?

**Dr. Marc Nantel:** I think it depends on the outcomes you want at the end. If the outcome you want is for Canada to generate new knowledge and keep us at the top of the pointy bit of science, then definitely universities are where you go. I sometimes say that colleges will not discover the Higgs boson or detect gravitational waves. That's been done already, although I may have to change my analogies. If what you want is economic development, jobs and small companies getting bigger in regions, then this is a type of impact we can have.

From the point of view of whether it is better to have college programs or have college and universities applying for the same programs, I think you should evaluate if a proposal is good based on the outcomes you want out of the research. If what you want is something that universities are excellent at bringing, then I think it's a university program. If it's something that colleges are excellent at bringing, then make it a college program.

There could be some that have both that apply, but then at that point, the evaluation criteria and the outcomes you want and expect should be adapted such that colleges won't be evaluated on the number of papers they write in nature or science, because this is not what we do. This is not our output. Our outputs are prototypes. They are new products that get commercialized so that our companies do better.

• (1225)

**Ms. Valerie Bradford:** Could you expand on that? I believe that in your opening comments, you explained how beneficial the applied research done by colleges is to companies. They own the IP at the end of the day, even though they may not really have the expertise to commercialize it without assistance.

Could you address the role that the research plays in your training of students and what skills they acquire when they take part in applied research projects? I'm looking at the student side of it.

**Dr. Marc Nantel:** Absolutely. Thank you. The shortness of the statement made me choose what I meant to discuss, but I'm glad you asked it as a question.

Students are in every project we do. We're a college. We're there to educate students and prepare them for the life of success that they hope to have. Every project we do has students.

In some cases, it's done in their classroom as part of a capstone project, and they get a grade for it. For some projects, we hire the students, and it's their part-time job or their co-op term to work full-time on projects during that period. They work very closely with industry partners. They are part of the meetings with them and part of the designing of the solution. They learn a whole bunch of essential skills, like dealing with adults, keeping time, managing, understanding budgets and understanding what outcomes are and why they have to keep to those outcomes. They learn how to present and how to write in a way that is business-related and not so much school-related.

The students who work with us on projects learn a whole lot on the innovation side, as well as on the essential-skills side. I'd like to think they are readier to hit the job market once they graduate and are more innovative employees who can help companies innovate from the inside.

At Niagara College, we typically see between 1,500 and 2,000 students do applied research through our innovation centres and our capstone projects. We're a 12,000-student college, so a good proportion of our students participate. Many more could if we could undertake more projects, obviously.

**Ms. Valerie Bradford:** Do you have co-op programs at Niagara College?

**Dr. Marc Nantel:** Yes, absolutely.

**Ms. Valerie Bradford:** Then they can go out and get the work experience.

**Dr. Marc Nantel:** Yes. They go with outside companies or community partners to do their co-op terms, or they can work in the research department, for example. A lot of them do that.

**Ms. Valerie Bradford:** Ms. Secombe-Hett, you mentioned in your opening statement that you would like to see us "targeting funds that build bridges between universities and colleges". Can you give us examples of how we could do that? Could you describe what that would look like?

**The Chair:** You only have 10 seconds, so if you could, answer briefly. Maybe we could get that in writing.

**Ms. Pippa Secombe-Hett:** Yes, I can certainly follow up.

There's a good example in ArcticNet research partnerships, which were led through Université Laval. They're partnerships with universities, colleges and northern residents. It's a great example.

**The Chair:** Thank you very much.

Mr. Blanchette-Joncas, you have six minutes.

[*Translation*]

**Mr. Maxime Blanchette-Joncas:** Thank you, Mr. Chair.

I would like to welcome the witnesses who are with us for the second hour.

Mr. Nantel, we can see that Niagara College ranks first in research, according to the college rankings posted on the Research Infosource Inc. website. Your institution actually has a greater research capacity than some universities. However, despite your effectiveness, the fact that you aren't a university puts you at a disadvantage when it comes to research funding. I would like to hear your thoughts on how the current funding structure could be amended or improved so that you can further develop.

**Dr. Marc Nantel:** Thank you for the question.

One of the things that would help us would be to have access to more programs that would allow us to lead major networks or large projects. In particular, there's a big project on agricultural innovations that's funded, I believe, by the Social Sciences and Humanities Research Council or the Natural Sciences and Engineering Research Council of Canada. When this project was launched a few years ago, only universities could register as principal applicants. Colleges could join in, but only as little brothers, if you will.

We created and lead, in an exemplary way, I think, the SONAMI network, which is the Southern Ontario Network for Advanced Manufacturing Innovation. This network has grown from 3 to 11 members and has succeeded in creating many jobs and commercialized projects.

So the colleges are able to eat at the big boys' table, but, the issue is, when people evaluate the kind of projects the colleges are normally involved in or want to do, they have to see what spin-offs we can bring about. These are not of the same type as those generated by universities. So funding programs have to be tailored to what colleges can do and what the government wants to achieve. That's one way we can grow.

The other way was mentioned by my colleague from Aurora College. Right now, we're not really well supported for the other activities that are connected to the projects we do, like data management, security or diversity and inclusion. We want to do all that, and we're doing it in a hurry on the corner of our desk, but the universities have a program that automatically subsidizes them to do that kind of thing. So we need to support project research, but we also need to support the stewardship of those research projects so that they're done right.

• (1230)

**Mr. Maxime Blanchette-Joncas:** Thank you, Mr. Nantel. I salute your college's initiatives, particularly the creation of the SONAMI network. We can indeed see that colleges have the capacity to do a lot of research.

I'd like to hear your opinion on how the research funding structure is set up in Canada. Do you think that applied research, which is done more in colleges, is underestimated? Is it given too little value, with the result that current funding programs allow colleges and CEGEPs less access to research funding?

**Dr. Marc Nantel:** Thank you for the question.

Sometimes, I am amused to think that universities have been around for a thousand years and colleges have only been around for 50 years, or so, in their present roles. College research has existed for only a few decades, from 20 to 50 years depending on the college. Quebec, with its CEGEPs and Centres collégiaux de transfert de technologie, is a little ahead of the rest of Canada. However, college research is a fairly recent phenomenon, which has not yet penetrated the general consciousness of the population and the people who make decisions.

I think there's a way to show the good things about college research a little more convincingly. It's good to have all kinds of places to do research, such as national labs, universities, colleges and industry. However, we should first determine the results we want to achieve, and then determine the optimal distribution of grants based on the desired results.

I think colleges could produce more, because they have more capacity, but they are limited by their financial resources. Colleges are there primarily to teach. Research is something they do for society. On the other hand, research is woven into the very definition of universities, and for them, research is a recognized function. Colleges could do a lot, but they need a little more help.

**Mr. Maxime Blanchette-Joncas:** To conclude, how do you think the federal government could put more effort into making the importance of applied research, which is done in colleges and CEGEPs in particular, better understood and promoted?

**Dr. Marc Nantel:** This study by your committee is a good starting point. It gives the colleges an opportunity to talk to you and give you data and facts, which you can put in your study report. You've heard from Aurora College, a small northern college, and from my college, which is different. I think that's a good first step.

Next, I suggest you come and see us on site. Most members who visit a college come away saying they had no idea colleges did all this. I'm sure some of your colleagues around the table agree. So come and see us. You're familiar with universities, but come and see us. You'll see what excellent work we do.

• (1235)

[*English*]

**The Chair:** Thank you.

I've visited Niagara several times. My youngest daughter has two diplomas from Niagara. I think we have shares in Niagara College as well.

**Voices:** Oh, oh!

**The Chair:** Mr. Boulерice, you have six minutes.

[*Translation*]

**Mr. Alexandre Boulерice:** Thank you very much, Mr. Chair.

I thank the witnesses for their presence, as well as for their invitation. I may go for a visit if I have the time, because I'm interested.

Ms. Seccombe-Hett, Aurora College's mandate is quite interesting, since it includes improving the quality of life of the people of the Northwest Territories by using science and technology, but also indigenous knowledge. This mandate therefore includes socio-economic objectives for the people of your region.

What research projects are currently under way as part of this mandate to improve the quality of life for the people of the Northwest Territories?

[*English*]

**Ms. Pippa Seccombe-Hett:** Thank you for the question. It comes under our mission.

I can give you some research examples. One is a partnership we hold with our territorial government and regional partners monitoring permafrost along the Inuvik Tuktoyaktuk Highway. We are really spending a lot of time investigating that, looking at slope stability, road stability and snow loads. In order to maintain that infrastructure, how do we best maintain the road? We have a college-university regional partnership conducting that work.

Another example is using UAVs to monitor slope stability above cultural sites that are important to indigenous communities in the region. Another example is using Lidars to measure wind speeds, and to look at putting alternative energy or wind energy systems in remote systems to diminish our carbon footprint.

Those are some examples of some of the research programs we're actively engaged in. Other ones are looking at contaminants in water around mines, looking at whether the water sources around some of our communities are safe and looking at the legacy impacts of mining, like arsenic from mining. Those are some examples of the work we're doing, if that's helpful.

[*Translation*]

**Mr. Alexandre Boulерice:** Earlier, we talked about climate disruption and the greater effect it's having on northern communities. You have a research centre on the reality of the Arctic, which is a vast territory that will become increasingly accessible, unfortunately. What research is this centre doing on the Arctic, and how can people in the Northwest Territories benefit from it?

[*English*]

**Ms. Pippa Seccombe-Hett:** Our research centre in Inuvik is busy. It is the hub of research activity in the western Arctic. You see people from our college conducting research on permafrost, water, infrastructure, energy systems—all types of things. Researchers from around the world are looking at treeline migration and climate

change impacts on fish, animals and terrain. There's a broad range of research going on, largely in partnership with some of our indigenous communities as well.

The return of information could be improved. A lot of research is conducted, and it takes a long time to make it back to the people. That has created tension, and it speaks to the inequity I mentioned earlier. All the funding is controlled by people outside of the region. There's no research funding to sort out your own challenges where you could really benefit from research.

There has been historic inequity across the north that's well documented. It remains a tension today, although our researchers are improving that. Having people on the ground working with the community changes that conversation slowly.

• (1240)

[*Translation*]

**Mr. Alexandre Boulерice:** Thank you. It's interesting to hear about these historical inequities.

Mr. Nantel, I won't forget you: I'll address you in the next round.

Ms. Seccombe-Hett, the government of the Northwest Territories has set five key priorities for research: cultural preservation, environmental science, health and wellness, natural resource management and community sustainability.

What do you think the federal government's role is in achieving these five goals when it comes to research funding? Is it well done, effective and adequately funded, or would you say the opposite?

[*English*]

**Ms. Pippa Seccombe-Hett:** There are many northern research questions. Funding is constantly a challenge, but maintaining capacity is equally a challenge. As we grow and develop the capacity, having access to more funds to conduct applied work will improve our ability to answer those questions. There are many unanswered questions that funding could help address, but it's also about having the capacity to address them.

Funding, increased partnerships and the ability to connect community to post-secondary institutions are very important.

**The Chair:** We'll move to the second round.

The first questioner is Corey Tochor from the Conservatives, for five minutes.

**Mr. Corey Tochor:** Thank you so much.

That testimony reinforces the importance of colleges in their communities. I applaud what you're doing with your local economies, both in the north and in the south.

Starting with Niagara, does the federal government increase funding amounts every year based on inflation at all?

**Dr. Marc Nantel:** Not really, no. It isn't based on inflation.

**Mr. Corey Tochor:** If you go back 10 years, what was funding roughly like? Be mindful of the time.

**Dr. Marc Nantel:** It was less, but it's not as if it was calculated with inflation, obviously.

I can't tell you about 10 years ago off the top of my head. In the past few budgets...we've seen some injections post-COVID. There was an injection for the CCI program at NSERC. That was much—

**Mr. Corey Tochor:** Has that kept up with inflation?

**Dr. Marc Nantel:** It wasn't an inflation thing. It was more like an injection post-COVID for getting out of this—

**Mr. Corey Tochor:** Did it keep up with inflation or not?

**Dr. Marc Nantel:** I wouldn't know how to calculate the compound interest of inflation over the past 10 years. I can get back to you on this, certainly.

**Mr. Corey Tochor:** Please do.

I'm switching to the north and the Aurora folks.

Up there, your funding is very similar. It's up a bit, but is it covering all your costs right now? Does it cover the increased costs associated with inflation?

**Ms. Pippa Seccombe-Hett:** No. We can do less with the funding than our counterparts in the south, certainly. The costs of everything in the north are double.

**Mr. Corey Tochor:** Absolutely.

To quickly spell it out to some of the people down here who haven't been to the north, how much is a jug of milk? How much is a litre, a gallon or four litres of milk? What is the rough cost up there?

**Ms. Pippa Seccombe-Hett:** Goodness. It's \$10. It really depends on the community. If the community is closer to the border, it's cheaper. Up in the coastal communities, it could be \$20 or \$25. There are programs to help offset that, but I think on average, it's \$8 to \$10—

**Mr. Corey Tochor:** Did I hear that right? Is it \$25 for four litres of milk?

**Ms. Pippa Seccombe-Hett:** When you look further north, yes, but I'm thinking it's probably around \$10. There are subsidies to support and offset that, but it's a constant challenge.

**Mr. Corey Tochor:** I have heard that the northern subsidy doesn't cover that, and one of the reasons is that milk gets taxed with the increase of the carbon tax. The farmers have to heat their barns and keep animals safe, and they're paying an increased carbon tax on that. Now there's a quadrupling of that tax. The cost to transport that milk up to the north also includes paying for the fuel, most of which is diesel, and for the increased carbon tax, which

makes life that much more unaffordable. Meanwhile, I think your facility unfairly feels the brunt of climate change.

We have a policy that does not lower emissions, does not help in our fight against climate change and costs you additional dollars, so your students in research in the north, it seems, get less done than those in the south. Would that be a fair comment?

**Ms. Pippa Seccombe-Hett:** Costs are higher in the north. There are a number of programs to offset research costs that are more available to universities than to colleges. There is a northern supplement that is not available to us within the college system that NSERC gives. There are other programs to offset—

• (1245)

**Mr. Corey Tochor:** What about the facility? You talked earlier in questions about how you use oil and some diesel for electricity. There is a limited amount of natural gas.

This is another place where Liberal policies have hurt your ability to do research in the north at your college. If we had a natural gas pipeline, you would probably use more natural gas than oil, but because of the Liberal Bill C-69, the “no pipelines act”, no new pipelines got produced to get clean natural gas up to your facilities.

Would you say that has negatively impacted your ability to lower emissions, because you're still using oil?

**Ms. Pippa Seccombe-Hett:** The emissions are higher with oil, certainly. Inuvik has a slightly more complicated scenario. We were on gas. The gas ran out and now we're back on oil.

**Mr. Corey Tochor:** If the new Conservative government removed Bill C-69 and we could get new pipelines built in Canada again, a natural gas pipeline to your community would lower your emissions. There are other technologies, like solar and whatnot, to lower emissions and ensure milk doesn't cost \$25 a jug. Would that be fair?

**Ms. Pippa Seccombe-Hett:** Some of our communities sit on large natural gas reserves that could be developed. I don't feel comfortable commenting on the pipeline impact, just because many of our communities are so remote.

**The Chair:** We're at time now.

Thank you for answering the best you could on some of those questions.

We'll go now to Arielle Kayabaga for five minutes, please.

**Ms. Arielle Kayabaga:** Thank you, Chair.

I welcome our second round of witnesses.

Could you share how much funding you receive from the federal government compared to other provinces?

**Ms. Pippa Seccombe-Hett:** Do you mean how much research funding?

**Ms. Arielle Kayabaga:** Yes.

**Ms. Pippa Seccombe-Hett:** I cannot give you that number at the moment. I would have to follow up and provide it after.

**Ms. Arielle Kayabaga:** Maybe you could talk about the areas where funding would be more beneficial for your institution.

**Ms. Pippa Seccombe-Hett:** Funding to our institution for research helps contribute to increased research administration services, which help us pursue funding through the competitive processes. The one we focus on largely is the NSERC college and community innovation program. Helping us have the core services that enable us to properly support our researchers to pursue funds to support their areas of expertise and collaboration with communities and industry would be key.

**Ms. Arielle Kayabaga:** I know that you conduct research projects in several areas. These includes health, energy, environment, food and agriculture.

I think anyone on the panel can answer this question.

Earlier, one of the witnesses talked about indigenous funding. I asked a question about minority funding, whether it's for indigenous communities, francophones or others who have a minority language. What's your approach to securing funding for minority groups that are within your institutions? Are there any, actually? I'm curious to know if you even have any.

**Ms. Pippa Seccombe-Hett:** At Aurora College, the population we serve is a majority indigenous population in the Northwest Territories. Then it's composed of a diversity of Canadians.

We do work with our indigenous partners to secure funds for research programs that align with their interests. I believe the tri-agencies have had some targeted streams specific to indigenous communities. That is identified in the strengthening indigenous research capacity strategy they're working on with an indigenous advisory committee.

**Ms. Arielle Kayabaga:** Is there any linguistic funding for communities that may be minorities based on language, like francophones, for example?

**Ms. Pippa Seccombe-Hett:** The Northwest Territories has 11 official languages. They are French, English and then nine indigenous languages. The funding for indigenous languages is a critical and important issue within our territory. The leads on that are the indigenous organizations themselves.

• (1250)

**Ms. Arielle Kayabaga:** What are the challenges you're facing in securing funding for those specific language researchers?

**Ms. Pippa Seccombe-Hett:** We currently are not conducting any language research. That work is led by indigenous governments and organizations. I believe—

**Ms. Arielle Kayabaga:** Would it be beneficial if there was research for language and for people who are in linguistic minority groups?

**Ms. Pippa Seccombe-Hett:** Certainly, I believe there is a need and demand for that coming from the indigenous communities and governments.

**Ms. Arielle Kayabaga:** Mr. Nantel, would you like to comment?

**Dr. Marc Nantel:** Indeed, one of our main funders is FedDev Ontario, which is a regional development agency. It is very strong in making sure that some of the projects we choose to conduct are about clean transition and are as diverse as possible in the people who start or run companies.

We certainly keep stats. As we talk with potential industry partners, the leads that come in and the projects we do, it's about diversity: Is the company women-owned? Is the company run by an under-represented minority?

At SONAMI, we have signed MOUs with the Canadian Black Chamber of Commerce, the 2SLGBTQI+ Chamber of Commerce and the Indigenous Chamber of Commerce to make sure that our services are known to the businesses that assemble under these chambers of commerce so we can help them better. We're trying to go as far as we can to bring them into our area of service.

**The Chair:** Terrific. Thank you very much for that comprehensive answer.

Monsieur Blanchette-Joncas, you have two and a half minutes.

[*Translation*]

**Mr. Maxime Blanchette-Joncas:** Thank you, Mr. Chair.

Mr. Nantel, you talked about the importance of your organization in terms of research. I'd like to hear more about the geographical aspect. We know that most colleges and CEGEPs are close to the population. According to the data we have, 95% of the population is close to a college. So people living in rural areas also have access to these educational establishments.

I'd like to hear more from you about the role you can play and the greater recognition you could get so that there's greater equity in funding. This would enable you to meet a great need and serve a large part of the population.

**Dr. Marc Nantel:** Yes, 95% of Canada's population is within 50 kilometres of a college, as is 86% of the indigenous population. So we're everywhere. Plus, the fact that we work mostly with local companies helps us improve local economic conditions.

As I mentioned in my opening remarks, Niagara College focuses on industry sectors that are important to its region, such as manufacturing, food, beverages, environment and horticulture, among others. Every college in Canada tends to do this.

You have to know that applied research with local businesses or non-profits is a contact sport, as they say. You really have to be ready. People have to come and try the new product we've designed with them, whether it's a new recipe or a new drink. They have to come and test the prototype we've just made for them. Often, when they adopt the technology, we'll help them install it in their factory. So proximity is very useful.

We get more convincing and effective results when we can keep a role in the company's future. Generally speaking, when we hand over the intellectual property of a product to a company, they want to know whether they should protect it, or how to market the product. We can help companies to do this, since we're usually quite close to them geographically, and thus guide them further in their economic development. Proximity changes everything.

Of course, companies across Canada can benefit from grants from the Natural Sciences and Engineering Research Council of Canada, but the more local FedDev Ontario grants, for example, target a certain region of Ontario. Generally, that's closer.

• (1255)

[English]

**The Chair:** I have to call time. I was listening to the answer and then I realized that I'm supposed to be keeping track of the time. Thank you very much for that.

Monsieur Boulerice, you have two and a half minutes.

[Translation]

**Mr. Alexandre Boulerice:** Thank you very much, Mr. Chair.

I find it a bit ironic that my Conservative colleagues are concerned about the price of food in northern communities, given that it was they, when they formed the government, who eliminated the program that subsidized the transportation of food in these communities, even though it's transportation that represents the bulk of the cost of food there.

Mr. Nantel, in your presentation, you talked about improving equity in access to federal research funding. What exactly do you mean by this notion?

**Dr. Marc Nantel:** Thank you very much for the question.

Sometimes, a program is designed to get university results and target universities, which is fine. At some point, however, someone points out that colleges were forgotten. So we add "and colleges" to the instructions, but it doesn't work. In fact, if the results and the kind of interventions desired are university interventions, no college is going to receive a grant, because the way assessors evaluate applications will favour universities.

Therefore, when you design programs and want colleges to be part of them, you need to look at the contribution colleges can make and adapt the evaluation criteria and desired outcomes accordingly.

**Mr. Alexandre Boulerice:** In other words, if the specific mandates and objectives of the colleges end up in the blind spot of the people who design the programs, the colleges are excluded.

**Dr. Marc Nantel:** That's sometimes the case, yes.

**Mr. Alexandre Boulerice:** I see. Fine.

**Dr. Marc Nantel:** Even though the letter officially states "and colleges", that is useless. We're really out of luck.

[English]

**The Chair:** You have 30 seconds.

[Translation]

**Mr. Alexandre Boulerice:** During the first hour of the meeting, university representatives told us that universities were competing with each other instead of working collaboratively, due to a lack of resources. Is this true of colleges also, or are things different in that universe?

**Dr. Marc Nantel:** The colleges find themselves, in a way, in a situation that pits them against the rest of the world, so to speak. We help each other to try to put more water in the pool, so we can all have fun. There's a lot of collaboration between the colleges, partly because there's not enough money. I don't really want to put it like that, but we'd collaborate more if there was more money. Two universities are part of the SONAMI network, and we collaborate with them. The colleges are much more collaborative.

[English]

**The Chair:** Thank you to the clerk for including colleges among our witnesses here this morning. It's tremendous to hear about the work going on at Aurora and the real challenges they face with keeping research alive not only in the institution but also outside of the institution, which they're working on.

Mr. Nantel, you were talking about working with industry. I graduated from Red River College Polytechnic in mechanical engineering technology. My co-op job back in 1979 had to do with a local blinds manufacturer. I used that co-op experience over my 30 years of experience in the field. I kept using that experience over and over. Thank you for the partnerships you have with our local businesses.

Thank you both, Dr. Nantel and Pippa Secombe-Hett, for being with us this morning and giving us your insights on colleges and post-secondary institution research funding. I had to cut you off a couple of times, but if there's any further information, please feel welcome to send it to the clerk.

To members of the committee, I have a heads-up. The indigenous knowledge study is going through translation right now. We should see version 1 of the report in early May, so we can take a look at it.

Thank you to the analysts for all of your hard work on that report. I'm looking forward to reading it. Those testimonies were incredible.

Let's get on with our day.

Is there a motion for adjournment? I see nods around the room.

(Motion agreed to)

**The Chair:** Thank you.

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