

44th PARLIAMENT, 1st SESSION

Standing Committee on Science and Research

EVIDENCE

NUMBER 056

Wednesday, October 4, 2023

Chair: Mr. Lloyd Longfield

Standing Committee on Science and Research

Wednesday, October 4, 2023

• (1630)

[English]

The Vice-Chair (Mr. Corey Tochor (Saskatoon—University, CPC)): I call the meeting to order.

Welcome to meeting number 56 of the Standing Committee on Science and Research. Today's meeting is taking place in a hybrid format, pursuant to the Standing Orders. Members are attending in person in the room and remotely by using the Zoom application.

I'd like to make a few comments for the benefit of witnesses and members. Please wait to be recognized by name before speaking. For those taking part by video conference, click on the microphone icon to activate your mike. When speaking, please speak slowly and clearly. When you are not speaking, your mike should be on mute.

For interpretation on Zoom, you have the choice at the bottom of your screen of either floor, English or French audio. Those in the room can use the earpiece and select the desired channel.

In accordance with the committee's routine motions concerning connection tests for witnesses, I am informed that everyone's logged in and tests have been done.

Pursuant to Standing Order 108(3)(i) and the motion adopted by the committee on Tuesday, June 6, 2023, the committee continues its study of the use of federal government research and development grants, funds and contributions by Canadian universities and research institutes in partnerships with entities connected to the People's Republic of China.

Our witnesses will provide five-minute presentations. Please watch your clock to make sure you're within five minutes. When you're nearing the end of the allotted time, if you're watching the screen, I'll try to get your attention to speed things up.

Starting off, via video conference, we have Jim Hinton, an intellectual property lawyer. Jim, you have five minutes. The floor is yours.

Mr. Jim Hinton (Intellectual Property Lawyer, As an Individual): Thank you for inviting me to speak with the committee again. I offer my apologies for not being there in person with you today. I have been following the committee's great work and will share some additional comments that build off the comments I made earlier, in June.

For those I have not met, I'm an IP lawyer, a patent agent and a trademark agent with Own Innovation. I'm a senior fellow at the Centre for International Governance Innovation, where I study in-

novation and intellectual property policy. I am also an assistant professor at the University of Western Ontario. I am appearing before the committee today as an individual.

It is clear that Canadian universities have had extensive ties with Chinese firms, as well as entities connected with the Chinese government and military. As we know, 50 Canadian universities have conducted extensive research with China's military since 2005, and Huawei has partnered with over 20 of Canada's research institutions.

While some Canadian universities have noted that they will not be working with Huawei in the future, many partnerships continue and are ongoing. In preparation for this meeting, I discovered that as recently as a few weeks ago, there have been new patent applications published, listing Huawei as owner, with Canadian university researchers as inventors, including people from the University of Toronto, UBC, Queen's, Ottawa, McMaster and Western. The filing dates for these patents go back to early 2022, which means that Canadian universities are still very actively building and transferring intellectual property to Huawei. This is despite ISED's "National Security Guidelines for Research Partnerships", which was published in 2021.

While patents are crucial for extracting economic value from research that may be published, that's just the tip of the iceberg. It's not just patents: It's confidential information on new areas of study. It's data—genomic data, health data. It's algorithms, artificial intelligence and software, but the universities are not sharing the information on what exactly has been transferred or to whom.

I previously made three clear recommendations, and I will reiterate them here with additional context.

The first is transparency. We need to know who is working with Canadian research institutions and how much they have been benefiting. We really don't know the extent of the relationships or their impacts. This information needs to be made available on an ongoing basis, and with certain aspects shared with the public. Where is the accountability? Who is responsible?

The second is that we need to have proactive policies that mandate that universities must work with Canada's intelligence community to be up to date on the latest intelligence and understand challenges to proactively manage relationships for Canada's benefit. This is not just a shared responsibility of the federal and provincial governments; the universities themselves must want to be higher-performing, not just to appease public funders but for their own relevance within the country.

The current construct to guide change, a working group of universities and the federal government, is fatally flawed. It is insular. It fails to include domain experts who understand IP, national security, data sovereignty and privacy, to name a few. In addition, the university and government working group does not include innovative Canadian firms. If we create policies that manage only the needs of government and the universities themselves, we can't expect that the innovative Canadian firms that actually commercialize technologies will be able to drive the economic value of this research for Canada.

Finally, we must retain strategic Canadian intellectual property and data assets. I said in June of this year that we must stop doing these terrible deals to make sure we don't get into the same problem again, but from what I've seen so far, it hasn't been having the necessary impact.

I look forward to continuing the discussion.

• (1635)

The Vice-Chair (Mr. Corey Tochor): Now we move to Ivana Karaskova.

The floor is yours for five minutes.

Dr. Ivana Karaskova (China Projects Lead, Association for International Affairs (AMO), As an Individual): I represent the Association for International Affairs, a leading think tank from the Czech Republic. Our focus lies in scrutinizing the PRC's activities within central and eastern Europe, including in the realms of science, technology and innovation, or STI. My purpose here today is to clarify the stance on trusted research in Europe and to outline some measures undertaken by the EU and several of its member states to enhance their knowledge security.

It's well within the purview of this esteemed committee to note that collaborative research efforts with China pose several challenges.

First, in STI, China focuses on, among others, artificial intelligence, quantum, deep space exploration, new materials, neuroscience and biotechnology. Given China's limitations in domestic production, despite its advancement in key technologies, it still seeks these technologies abroad, utilizing both legitimate and grey zone means to acquire them.

Second, as China strategically uses foreign technologies to boost its own technological base and enable domestic innovation, it increases the competitiveness of its industry and research sectors visà-vis foreign counterparts.

Third, China has been clear that its ultimate goal is to substitute foreign technology with indigenous development and to achieve dominance in key sectors across the board. This ambition has been

coupled with a lack of reciprocity in allowing foreign institutions access to the Chinese STI sector.

Last, Chinese technology acquisition abroad is tied to the modernization of its military, as many of the technologies are of a dualuse nature. By engaging in technology co-operation and transfer with Chinese counterparts, foreign research institutions may indirectly be supporting the growth of Chinese military prowess.

The EU has gradually become aware of these challenges. Yesterday the European Commission revealed a list of 10 critical technologies, with four of them seen as more sensitive: advanced semiconductors, artificial intelligence, quantum and biotechnologies. These technologies were singled out based on criteria of their enabling and transformative nature, the risk of civil and military fusion, and the risk of misuse of the technology for human rights violations.

The European Commission recommends a collective risk assessment by the end of this year. Though the legislation is in the form of a recommendation only and China is not specifically mentioned, it sends a strong signal that in the current geopolitical competition, the EU intends to actively participate rather than be a bystander.

Despite the new push by the European Commission, the sense of urgency and the efficacy of measures adopted to mitigate risks of research collaboration with China differ substantially among EU member states. In central and eastern Europe, the awareness of the issue is still in a nascent phase. Our research conducted in central Europe revealed that more than 800 research outputs received exclusive funding from Chinese sources—including from the thousand talents program and the central military commission, a body overseeing the People's Liberation Army—and the co-operation has been constantly growing. In light of the interconnected global research landscape and the prevalence of international project consortia, safeguarding knowledge in individual countries and collaborating with allied nations assume paramount significance.

I would like to conclude with five recommendations that may also be applicable in the Canadian context.

First, it's important to address the elephant in the room. Most of the recommendations and guidelines published by various institutions globally adopt an actor-agnostic approach. However, China's global reach and far-reaching goals, its increasingly revisionist agenda and the nature of its political regime make it a risk and a challenge like no other. Moreover, it would help universities to comprehend the challenge more if the recommendations were actor-specific regarding the nature of the risks and the areas that should be safeguarded.

Second, drawing red lines may give universities and research centres clearer indications of potentially risky areas.

Third, measures targeting universities and research centres have to be designed with the aim of bringing them on board as collaborative partners. In all processes, they should be supported by national administrations financially and also legally.

Fourth, instead of appointing a security manager at each research centre and university, one national contact point may be created, which would provide advice and issue recommendations. This system already works in the Netherlands, where it helps universities with due diligence.

(1640)

Last, Europe as well as Canada and other like-minded countries would have to ensure they stay competitive. Especially in the field of emerging technologies, research funding needs to ensure that the most promising activities stay domestic.

Thank you. I appreciate your esteemed committee's attention to this pressing matter, and I'm looking forward to your questions.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

Now for our final witness on this panel, we'll have Kevin Gamache for five minutes.

Kevin, the floor is yours.

Dr. Kevin Gamache (Associate Vice Chancellor and Chief Research Security Officer, Texas A and M University System Research Security Office): Thank you, and I appreciate this invitation to appear before the committee.

I'm the associate vice-chancellor and chief research security officer for the Texas A&M University System. I'll discuss the unique challenges of protecting cutting-edge technology and maintaining national security in academia's research environment.

The Texas A&M University System is one of the United States' largest higher education systems, with an annual budget of \$7.8 billion. Through a statewide network of 11 universities and eight state agencies, the A&M system employs more than 26,000 faculty and staff members, and educates more than 153,000 students annually. System-wide research and development expenditures exceed \$1.1 billion, significantly driving our state's economy.

One of the primary roles of academic institutions is the free and open generation and dissemination of knowledge. The U.S. research enterprise provides the foundation for a diverse and driven workforce and fosters discovery and innovation. International col-

laboration is critical to scientific advancement and the success of research institutions in the United States.

American universities have become a magnet for students and researchers worldwide to join forces in solving our most pressing problems and promoting scientific advancement. Unfortunately, our technological leadership is under siege by governments of countries such as Russia, China, Iran and others whose rules for information sharing and research integrity differ from ours. These governments are extracting intellectual capital, cutting-edge data and specialized expertise at an unprecedented rate and risking our technological leadership. Academic sector entities must work closely with our federal partners to protect information and research with national security implications.

In 2016 the A&M system's chancellor, John Sharp, recognized this growing threat and established the Research Security Office, or RSO, at the A&M system level. The RSO provides program management and oversight of all A&M system classified research, controlled unclassified programs and export-controlled research.

Understanding our collaborators is one of the most important aspects of any research security program. With whom are we collaborating? Who's funding these collaborators? Is there a foreign government nexus? What are the risks to the institution? Can these risks be mitigated? To answer these questions, the RSO has established a robust due diligence program through which we review all visiting scholars and post-doctoral researchers from countries of concern. In addition, we vet all personnel engaging in our most sensitive research programs.

Our policies require mandatory disclosure of all foreign collaborations and approval of foreign travel. We conduct continuous network monitoring and have included keywords and signatures in our data-loss prevention systems explicitly focused on identifying malign foreign influence in our research enterprise. We've updated system-wide conflict of interest and commitment policies, and established processes for reviewing and approving foreign collaborations and agreements. We established a NIST 800-171-compliant secure computing enclave that is available to all members of the A&M system to protect our sensitive research funded by the federal government.

Underpinning all of this work is a robust relationship with our federal partners, including the Defense Counterintelligence and Security Agency, the Department of Justice, the Federal Bureau of Investigation and other members of the intelligence community. Collaborations between academia and the federal government are critical to addressing these threats. FBI Director Wray has stated that we can't arrest our way out of this problem. As the single point of contact within the A&M system, the RSO interacts daily with our DCSA and FBI partners. My office also maintains proper clearances, information-sharing and collaboration capabilities, and secure facilities for meaningful engagement with our federal partners.

Soon after the RSO was established, we created the academic security and counter-exploitation working group, an association of university research professionals and their federal counterparts. ASCE exists to leverage the expertise of universities that have demonstrated excellence in research security programs to help address the threat foreign adversaries pose to U.S. academic institutions and conducts international outreach to build a global dialogue and robust community of practice. We're actively engaged with the Canadian U15, in particular.

• (1645)

The first academic security and counter-exploitation training seminar was held in 2017 to provide a forum for universities to benchmark and share best practices from their respective programs. The seminar has grown since that first year to include the broader academic community and increased federal engagement.

While the ASCE training seminar allows academic security—

The Vice-Chair (Mr. Corey Tochor): I'm sorry. We are over our time allotment. There will be an opportunity in the answers and the questions to hopefully bring out what you were about to say.

I'd also like to remind all witnesses that you can always do a written brief, once you've done your testimony, on any matter on the subject that you think is relevant.

Starting off our first six-minute round of questioning, we have Gerald Soroka. Gerald, the floor is yours for six minutes.

Mr. Gerald Soroka (Yellowhead, CPC): Thank you, Mr. Chair. Thank you, witnesses, for coming today.

I'll start off with Mr. Hinton.

If the People's Republic of China infringed on Canadian intellectual property, do you know of any remedies that those impacted could pursue? Does the federal government support pursuing remedies for international infringement on Canadian intellectual property?

Mr. Jim Hinton: That's a very good question.

To reiterate, the question is what would happen if a Canadian company had its IP infringed upon in China—

(1650)

Mr. Gerald Soroka: Exactly.

Mr. Jim Hinton: —or by a Chinese firm.

There are no resources within the country. The company would be left to its own devices to manage that. I work with Canadian companies that have to manage that on an ongoing basis.

Really, the expectation is that if you're working in a manufacturing perspective in China, you will be copied, so try not to give away so much information that you would lose your economic advantage if it was copied.

There are no resources. There are things that are coming on, like the Innovation Asset Collective, the patent collective and IP Assist, but really, these are not from an infringement perspective or for preventing foreign companies in China from copying or infringing IP

Mr. Gerald Soroka: Does the government recommend trying to go after them, or not at all?

Mr. Jim Hinton: There are no recommendations. It is up to the company to determine whether it's in their financial interest to do that. The Chinese patent and IP systems continue to evolve.

There have been some successes, but it is a very challenging task to enforce IP within China.

Mr. Gerald Soroka: When we're dealing with international collaboration in research or with academic institutions, does Canada have any laws to protect IP or not?

Mr. Jim Hinton: We have our domestic laws. We have the Patent Act and the Trademarks Act. When it comes to international actors, they would apply, so if somebody's infringing the patent within the country, we have those laws. They are generally parallel to or harmonized with global rules.

Mr. Gerald Soroka: You mentioned Huawei partnering with 20 different Canadian research institutions. What are the repercussions of that in terms of our allies, such as the Five Eyes partners? How do you think they view us?

Mr. Jim Hinton: Not very well.

It was more than five years ago that the U.S. and Australia banned Huawei from the telecom networks. Since then, we've continued to feed the Huawei machine with intellectual property, with hundreds of patents. It's not a very savvy move from a business perspective. When you layer on the national security issues that are presented, it's even more foolish.

We have a lot of catching up to do. This is not something that should surprise anybody. It was in May 2018 that Huawei was revealed by The Globe and Mail to be systematically moving IP out of Canada. It's been ongoing.

To me, it's only the public outcry that has reoriented the universities from continuing to do these deals. It's not their own understanding of the economic impacts or the national security impacts.

Mr. Gerald Soroka: You gave recommendations, but I want to know about the steps we need to take to show our allies that Canada's taking this issue seriously. Could you give some advice on that as well?

Mr. Jim Hinton: Well, it's action. We have to do what we say we're going to do. When we say we're going to ban organizations like Huawei from our telecom infrastructure, we also need to be consistent. Are we going to fund and incentivize these same organizations, to the tune of tens of millions of dollars, to work with our universities and pull out the IP? We have to stop—simply, we have to stop—doing what we've been doing.

As I mentioned, I did a quick search, and there were patents filed and published on September 21, 2023—just weeks ago—coming out of institutions that I work with. I'm an alumnus of U of T. I teach at Western. I was at Osgoode at York University teaching this term as well. I know these institutions well. They're not reorienting, or they're not reorienting fast enough. We have to both do that and signal that we're reorienting and prioritizing economic activity as well as national security activity.

Mr. Gerald Soroka: I know that the minister was here on a different issue a few months ago, saying how they're really going to take steps, but are they actually doing enough? Are they just dragging their heels, or are they allowing universities to have their own policies in place?

Mr. Jim Hinton: What concerns me is that we think "no one told us not to do this" is any way to manage billions of dollars in publicly funded research. This is Canada's economic future. Ivana said it best—that the most promising opportunities need to remain domestic. We're letting this go. It's not happening. The universities are not governing themselves properly. This is a governance failure at the university level. It's also a provincial and federal responsibility.

Everybody has to step up and say that we need to do better and we need to reorient.

• (1655)

Mr. Gerald Soroka: In February the government announced that they're going to be doing all this. They're really not responding as quickly as they need to, are they, given how quickly technology is evolving?

Mr. Jim Hinton: With technology, the geopolitics continue to shift. We see this with different countries. It's China, it's Russia, it's Iran and it's other countries. We need to be very dynamic, and universities move slowly. Government moves slowly.

That's why I suggested that domain experts who move quickly and understand how things have dynamically changed should be involved. There are the groups you've had as witnesses, but there are also the innovators themselves. People on the ground who are commercializing technology understand how things change and how things shift, especially when it comes to things like artificial intelligence and data. They need to be a very close ally and a resource when setting these policies and in moving quickly to implement them

Mr. Gerald Soroka: It looks like I don't have any more time. Thank you.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that, Gerald.

Ryan Turnbull, you have six minutes.

Mr. Ryan Turnbull (Whitby, Lib.): Thanks, Chair.

Thanks to the witnesses for being here for this important study and for their testimony today.

My understanding is that our government, unlike the Harper government, took research security very seriously. In June 2021 we put in place the pilot research security guidelines. We created a mechanism to assess applications through the Alliance program to protect Canadian researchers or institutions from risky partnerships. I believe it's working. Last year a series of decisions were made, in partnership with Public Safety Canada, to categorically reject all applications involving Huawei. We also now know that we're working to expand on these guidelines and to capture the risks with any military entities.

From my perspective, our government has been very clear. I think many of the post-secondary institutions are following suit or have taken that signal. That's just a statement.

Mr. Gamache, I want to get back to you. You mentioned the importance of research security officers, or the office that you suggested was playing a central role. I note that our government in budget 2022 made a budget commitment to a research security centre, standing that up through the Department of Public Safety, and that's forthcoming. That would be providing central support for researchers across the country.

Could you share a couple of best practices from your RSO that we might take into account when standing up that research security centre?

Dr. Kevin Gamache: I'd like to say first that I understand the strides the Canadian government has made over the last two years in particular. Some of the products you developed at the national level are very impressive, because we haven't seen that same kind of activity here in the United States. In fact, we've taken some of the documents that you developed and used them as models here. I've also been very impressed with some of my colleagues at Canadian universities, particularly my colleague at the University of Toronto.

Ultimately, I think the best practices come down to what kind of due diligence program a university has. As I mentioned, we spend a lot of time trying to understand who we're collaborating with so that our administration has the knowledge it needs to make an informed, risk-based decision. Everything is going to be based on the quality of the due diligence that we do on individual collaborations and individual projects, and we devote a lot of time to that.

I think the other thing that is very important is that ultimately universities are going to have to solve this problem. Some universities are farther along on the progression than others. We've been very successful here in the United States, especially with our academic security and counter-exploitation program and having universities with great experience help those that don't have that much experience.

Ultimately, the problem is going to be solved by faculty buy-in, so we spend a lot of time developing individual relationships with faculty, helping them understand the risk to their intellectual capital and getting them to become part of the team.

(1700)

Mr. Ryan Turnbull: Thank you. That's a really great and thorough response.

I'll go to Ms. Karaskova. You mentioned an actor-agnostic approach and talked about the risks and challenges, and you mentioned an actor-specific approach. I wanted to clarify with you that you're not advocating, as I understand it, to ban research entirely with certain countries.

Are you, or did I misunderstand what you were saying?

Dr. Ivana Karaskova: No, not at all. I didn't mean it the way it probably came out.

The problem here is that if you have actor-agnostic recommendations, most of the universities simply do not comprehend them. You are talking about some countries, some risks and some non-democratic actors, and the initial response from universities and research centres is, "Who and what should we safeguard, exactly?"

If you can't make the discussion about China—and most of the time it is about China—then we pretend it's not about China. Most of the time, if it is really about China, we have to say China is going after 15 critical technologies, and China is not shy about it. It's basically in all of the documents. All of the technologies that are listed for import are actually there. It's not just quantum computing; it's a specific type of quantum that is sought by China.

I think we probably have to go with the balanced way and have an actor-agnostic approach whereby we are talking about risks, no matter what kind of actor is posing them, but also job risk that is specifically about China as an actor that has very unique characteristics within the STI system, the science, technology and innovation system.

No, I'm not an advocate for vetting all of the co-operation with China, for the simple reason that in some areas, such as artificial intelligence, we are actually losing out. If we want to have access to Chinese data, we will have to be smarter about how to get this data and how to co-operate and collaborate with China, but under our terms, to make sure that the research is protected from our side.

Mr. Ryan Turnbull: Thank you for that.

The Vice-Chair (Mr. Corey Tochor): As a reminder to some of our new committee members, when I am the chair, I don't like cutting off anybody, especially witnesses, so I will give them a bit of leeway to go a bit long, but I will cut off members if they purposely use my generosity in that regard.

Moving on to the next MP, we have Maxime Blanchette-Joncas from the Bloc for six minutes.

[Translation]

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

Welcome to the witnesses joining us for this study.

Ms. Karaskova, you made recommendations to the European Union and European countries, including creating an independent national point of contact to provide advice to research institutions and set up training.

You said the Netherlands already had such a system in place. Can you provide more detail on how it went? How did research security improve as a result, and what benefits did the system provide?

[English]

Dr. Ivana Karaskova: Certainly.

The system is relatively new—it was set up a couple of months ago—so it's still gathering the primary data. However, there is obviously a learning pattern, so the first questions that came from scholars and also from universities and higher education institutions were kind of basic questions. The majority of them were still about China. Now there is a learning curve, so they ask very specific questions, especially about the due diligence to very specific matters.

How it differs from other systems is that in some countries, such as the Czech Republic, we decided to appoint a security manager in each and every university, which is financially kind of costly.

The Netherlands went the other way. It created just one national contact point under the government. It has a link towards all the ministries that may be affected. Also, it has a direct link to security services. In this regard, if an individual or an institution has a question, it can basically reach an answer, including an answer from security services, on whether it's a good idea or not. The problematic point here is that the recommendations from the national contact point are still voluntary, so the university can decide that despite all the odds, it still wants to proceed with the co-operation.

● (1705)

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you, Ms. Karaskova.

As you pointed out, even when a country establishes a national point of contact, as the Netherlands did, universities can proceed voluntarily.

Conversely, Australia automatically requires that any collaboration with a foreign country be reported directly to the government. Where do you stand on that? [English]

Dr. Ivana Karaskova: I'm not sure whether my response would be adequate, because I'm not that familiar with the Australian system. However, I don't think that it's probably feasible because of the sheer size of the co-operation, especially when it comes to some of the countries that are technologically advanced in those, let's say, 15 critical areas. Reporting each and every research co-operation to the government seems to be a disproportionate measure, basically, to take.

What is probably a better way to do it is to focus on those crown jewels that should be protected. However, once again, the question is this: Who is to define the crown jewels? Here we often breach the autonomy of the universities. Any system has to be balanced between the needs of the universities and how they don't want academic freedom to be taken away from them and the needs of national security. That's a very delicate matter.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you very much.

In 2016, you launched two projects, MapInfluenCE and China Observers in Central and Eastern Europe, which focus on examining Chinese influence in central Europe.

How has China's influence in the region changed in recent years? [*English*]

Dr. Ivana Karaskova: That's my favourite question. Thank you very much. I can spend hours on that.

Just very briefly, while China entered central and eastern Europe with the 16+1 initiative in 2012, over the period of the past 10 or 11 years we have seen China be much more skilful, I would say, in influencing the response of society.

It started originally with just reaching out to the governing party; then to the opposition parties; then to the opinion-makers; then to journalists, for example; then to academia; and now to the general public. We do see China, then, actually reaching all the levels of society.

One thing that is the most worrisome, probably, is that it's no longer messaging to the local populations just the positive news about China, that China is a wonderful country. It's not just trying to spread so-called "positive energy". Now it actively works with those anti-government forces, the fringe political parties, the extreme right and the extreme left. That's something that we have seen Russia doing in our particular region for quite some time, so I also see a pattern of learning from one another. In this case, China is learning from Russia how to influence more.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you, Ms. Karaskova.

I don't have much time left, so I'd appreciate it if you could get straight to the point for this next question.

Do you think universities and other educational institutions are paying more attention to security issues around research and intellectual property? [English]

Dr. Ivana Karaskova: I just want to make sure that I understand the question. Are you asking me whether the universities are taking up some measures against the influence?

Yes, you are.

It varies in different countries. In my region, central and eastern Europe, I would say that the Czech Republic is a front-runner in this effort, but it started only with a huge scandal that we had with one of the oldest and most prestigious universities. This university had some of its activities funded by the Chinese embassy here in Prague, including classes on belt and road initiatives and the profiling of students who later on were invited to China on fully funded trips. After the scandal, the country started to move towards the right direction, but it's still very slow and nascent, I would say.

• (1710

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

Now, for the final round of questions, we have Gord Johns for the NDP. The floor is yours, Gord, for six minutes.

Mr. Gord Johns (Courtenay—Alberni, NDP): Thank you.

I'll start with Mr. Gamache.

Benjamin Fung, on behalf of Alliance Canada Hong Kong, appeared before the committee on September 20, 2023, and he described China's recruitment strategy as "feed, trap and kill". It involves attracting targets by making lucrative offers and then making unreasonable requests, such as "transferring IP rights, getting sensitive data or asking the professor to say something that may not be true."

Mr. Gamache, can you speak about how familiar you are with this strategy and maybe about how we can combat these types of recruitment strategies? If not, are researchers sufficiently aware of this type of threat? How could we increase their awareness?

Dr. Kevin Gamache: I'd like to say that in my experience, there is a lot of naïveté amongst the faculty. I have seen numerous cases of substantial amounts of funding being used to lure research from the U.S. to China in particular. That would be the attract and capture part.

I have not seen the "kill" portion of that analogy, but I do still see very, very active recruitment across the board, particularly in the hard sciences, engineering and agriculture.

Mr. Gord Johns: How do we combat these kinds of recruitment strategies? How can we increase awareness?

Dr. Kevin Gamache: Once again, I think it's through engagement among our federal partners, our research security office and the faculty. This is a problem that is ripe for more effort in awareness, and I think that we're just breaking the surface right now in that area.

Mr. Gord Johns: Should we establish a list of organizations that Canadian research institutions should avoid forming research partnerships with? Making such partnerships ineligible for federal funding could be a way forward. Do you think that that's a good approach? Should such a list be made public or be shared with universities, since there's a risk that the organizations listed will adopt concealment strategies?

Dr. Kevin Gamache: The adoption of concealment strategies is certainly an issue. It becomes very much a case of whack-a-mole.

Various lists, as you described, do exist in the United States. We have consolidated those lists here within the A&M system and we have used that as a tool and an integral part of our due diligence process. Certainly, I think that those kinds of lists, while they potentially can lead to concealment, are also very valuable to guiding researchers to proper relationships.

Mr. Gord Johns: Which do you think is better: a China-specific approach or a more broad approach of being aware of all the different threats?

Dr. Kevin Gamache: I think the most effective approach is to focus on behaviour. I think when you do that, ultimately one country is going to rise to the top. Really, I think what we need to be focusing on are those kinds of behaviours that really compromise research relationships.

Mr. Gord Johns: Ms. Karaskova, in your report, "How to Do Trusted Research", you describe the findings of an online questionnaire of the experiences of researchers who have been funded at least in part by China. I quote:

The survey revealed these researchers did not report any negative experience connected to cooperation with China which also correlates with the positive perception of Chinese funding. Unsurprisingly therefore, the research cooperation with Chinese counterparts was not perceived as a potential risk by 65 percent of the respondents who filled in the questionnaires.

You also cited the following:

Respondents predominantly underlined the importance of previous positive experience with a Chinese partner and personal contacts or experience gained in China. They also highlighted that it has mainly been Chinese partners who initiated the research cooperation.

Is this the main problem—that our researchers are unaware of the threat posed by China? How do we change this perception?

● (1715)

Dr. Ivana Karaskova: It's not just one of the problems; I think it starts at home.

What the researchers actually cite is that they have quick access to money, to funding, while in the European Union they have to apply constantly for grants, with a very uncertain ending as to whether or not they will get the grant. In China, it's relatively easy. The paperwork is even easier. That's one of the reasons they said that it has over-bureaucratized science applications, basically discouraging them from even applying, or preferring Chinese funding to other sources of funding.

The second point is that China has all the infrastructure. They said it's easy. It's convenient. It's very fast to receive basically everything they need.

Third, they also cited as one of the reasons that they don't have to deal with ethical issues or ethical standards in science in China, though they covered it up, I would just say bluntly. If they want to co-operate with Chinese partners, they will get very quick results without actually needing to have ethics boards consulted for various kind of experiments. These are things that make China attractive for different collaborations.

Last but not least, there's also a great deal of naïveté, as Kevin said. They do focus just on their single science area, be it experimental physics, or.... They basically do not see all of the geopolitical implications. Once again, we will have to go individual by individual—not necessarily to directors and vice-directors and deans, but actually to the heads of laboratories and individual researchers to raise their awareness, and perhaps coupling carrots with the sticks from our side. It's not just about levelling the playing field in terms of providing better access to funding; it's also to make them aware that there are consequences of co-operation with China sometimes.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

Moving on now to our five-minute round, we have MP Soroka from the Conservatives.

Mr. Soroka, the floor is yours.

Mr. Gerald Soroka: Thanks, Mr. Chair, and thanks and to the witnesses again.

I'll start off with Ms. Karaskova.

In many of your articles and even today you spoke about the economic co-operation between Europe and the People's Republic of China. I'm just curious, though, given that we've now seen in Canada the People's Republic of China's political influence through our economy, and now through our academic institutions, and potentially even our electoral system, what do you think can be done to stop this intensive PRC influence across Canadian society?

Dr. Ivana Karaskova: It's a very broad question. I will try to tackle it in the few minutes that I have.

Broadly, once again, we have to call a spade a spade. Don't just hide it behind very vague statements, but be more open about what is actually problematic in Chinese influence or interference. Here I am alluding a little bit towards what you mentioned, and that's the interference in our electoral systems. As Jim mentioned, probably more transparency would beneficial in this respect. That's one thing.

The other one, of course, is raising awareness as the second step, based on more transparency from our side.

Third is basically identifying the loopholes we have in the system. China, the other actor, is not creating the loopholes. These already exist within our societies, either within societal divisions or through the lack of legislative actions on different loopholes in different areas.

Mr. Gerald Soroka: If you have more that you wish to put forward in writing, I would be fine with that as well.

You mentioned that European governments are starting to put in place some policies. Do you think some of those policies would benefit Canada at the same time?

Dr. Ivana Karaskova: I think it's more or less leaning in the same direction. Though the approaches may vary, they may be coming back to this recommendation of the European Commission. It would probably have been more powerful if it were a different form of legislation. It is actually moving in the same areas, and also outlining the same areas that need to be tackled, which are semi-conductors, artificial intelligence, quantum, biotech and all the others

One more thought on this is that none of the allied countries should be left out, because what our research also proved is that if China can't find the technology in a more technologically advanced country, it will focus on those loopholes. It will find countries that have pockets of excellence in different areas of research but probably don't have much of the safeguards.

• (1720)

Mr. Gerald Soroka: They're just looking for great opportunities.

I will cede my remaining time to Mr. Lobb.

Mr. Ben Lobb (Huron—Bruce, CPC): Thanks, Mr. Soroka.

This question is for Mr. Hinton.

At our last meeting, Dr. Chad Gaffield was here, representing U15. I'm sure you're very familiar with him. He's a nice individual.

I asked him some questions, and he said that he thought all of us today can feel very confident that our research on our campuses is being undertaken in secure ways that do not threaten us.

Mr. Hinton, do you think that's the way it is, or is there still some room for improvement?

Mr. Jim Hinton: With due respect to the lobbyists who appeared before that committee—and I watched it intently—that was a very interesting response.

Not enough is happening. From my perspective and from the public's perspective, the U15 universities in Canada were caught red-handed, benefiting themselves at the expense of national security, and then had the gall to ask for more money, saying they were not getting enough.

I'm not impressed with what the group said. Acknowledging there was a mistake and saying they're going to correct it was probably the more appropriate response, but to me, saying that everything is humming along well signals that there is still a failure of governance and leadership.

Mr. Ben Lobb: I have one last question about something that surprised me a bit. At the end of our conversation, the answer was that we should leave it up to the granting agencies and Public Safety Canada, but there are really no checks and balances. It's just all based on good hopes.

What do you think about that?

Mr. Jim Hinton: Despite being world-renowned academics, they continue to confuse science and research with innovation. Innovation is about economic use of science and research, and universities are not the ones that are extracting economic value from the research. Firms are doing that.

They talk a lot about talent and talent creation, but that is just the starting point. There need to be organizations and firms that receive that talent, generate intellectual property, commercialize it and make money globally from that spot. To say that everything is working is not accurate.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

We'll move on to Valerie Bradford from the Liberals for five minutes.

Ms. Valerie Bradford (Kitchener South—Hespeler, Lib.): Thank you, Mr. Chair, and thank you to our witnesses for freeing up time for this very important study. We really appreciate your input.

Research security is obviously a very serious issue, and it needs to be addressed. However, I've heard of instances and worries of racism, discrimination and bias towards researchers of Chinese origin as a result of some of the intense commentary on the issue.

Dr. Gamache, what is the impact on the research community in this regard?

Dr. Kevin Gamache: Certainly that can be an issue.

Unfortunately, based upon what I have seen, the behaviour that we're talking about today is being exhibited more by one country than by any other, and that leads to an opportunity for somebody to make this an issue of racism or xenophobia. That can have a chilling effect, and I think it has had a chilling effect, but once again, I think that is all the more reason that we need to focus on the behaviour rather than on countries, because this is a very serious problem.

Our research across the entire A&M system in 2021 demonstrated to us that 80% of the problematic collaborations were coming from a single country. Those were just the statistical facts. Because of that, I think it's easy to make it something that it isn't, and we need to focus on the behaviour.

● (1725)

Ms. Valerie Bradford: Thank you for that.

Can you comment on the harm that could be done if the issue isn't addressed in the right way? For example, some people are calling for a complete ban on all research with China and collaboration with Chinese researchers.

Dr. Kevin Gamache: I think the research enterprise is something very special. It is designed the way it is for a reason. It is based on free and open collaboration and the exchange of ideas. It is based upon reciprocity. It's based upon transparency.

My fear is that we have an adversary who has taken every strength of our research enterprise and has turned it into a vulnerability. We run the risk, if we don't handle this properly, of breaking a system that's very important to us, and that is my biggest fear.

Along with that, if these sensitive issues aren't handled properly, certainly there is an opportunity to ruin careers and to make it an issue of xenophobia where no xenophobia exists.

Once again, I think we have to handle the solutions to these problems very carefully.

Ms. Valerie Bradford: Thank you.

Dr. Karaskova, you mentioned about 10 critical technologies that are enabling and transformative, and the risk of their misuse.

What about evergreen entities and a list of sensitive areas of research that could be informed by the work being done by the European Commission? Do you have any thoughts on that?

Dr. Ivana Karaskova: No, not particularly, so I do apologize. It's not specifically my area.

Could you perhaps rephrase that? Otherwise, I will cede my time to others if they want to comment.

Ms. Valerie Bradford: Okay. I was just wondering, if there are evergreen entities and if they could be listed, whether that would help inform some of the work that is being done by the European Commission. Do you have any thoughts on that?

Dr. Ivana Karaskova: I'm sorry. I don't have any thoughts on this one, but I'd be happy to elaborate in my written testimony.

Ms. Valerie Bradford: Okay.

I guess my time is pretty much up.

If you want to give that question a little more thought and research, could you send us something in writing? Thank you.

Dr. Ivana Karaskova: I will.

The Vice-Chair (Mr. Corey Tochor): Thank you kindly.

We're now moving on to our final two-and-a-half minute rounds.

For the Bloc, we have MP Blanchette-Joncas. The floor is yours for two and a half minutes.

[Translation]

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

Mr. Hinton, it's a pleasure to have you back as a witness.

I listened to your recommendations carefully. You would like to see greater transparency and a better relationship with universities to increase confidence, security, dialogue and collaboration. You also talked about ways to protect the knowledge economy within the education sector in order to benefit from it.

You raised a very important point: leadership, in other words, bringing the experts together to establish best practices, better ways of doing things and, above all, clear guidelines around national security and research.

Back in February, the federal government announced that it was going to ask universities to comply with a list of institutions that could no longer receive funding and with which they could no longer collaborate. The announcement was made in February. My fellow members and I asked witnesses about this during the committee's last study. It's October, and still no list.

I'd like to hear your views on that, since you're a university professor. Does that undermine collaborative projects you're planning in the university sector?

[English]

Mr. Jim Hinton: Yes, not having clear guidelines and a clear list to help guide researchers on who to work with and who not to work with is absolutely slowing things down and stifling opportunity to research.

We need to move quickly on this. As Kevin aptly pointed out, there are a number of lists and there are places to start. We're late to the party here, but a lot of other people have already started dancing and we can jump in time and continue on. We don't need to build this from scratch.

(1730)

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Hinton.

Some provinces didn't wait for the federal government's guidelines and decided to establish their own guidelines for their universities.

Given your experience as a professor, will the situation become so serious that universities will empower themselves to ensure their own security, if they don't receive any guidelines from the federal government?

[English]

Mr. Jim Hinton: Yes. We've seen that Alberta is a particular example, and Quebec, as you know, has Axelys and other programs that are working very closely with universities.

A lot of this is a provincial matter, so the provinces need to step up as well, but it is also federal, provincial and the universities. Everybody has to be responsible. It's my responsibility, as somebody who sees this happening, to not stay quiet about it.

It's only because of Sean Silcoff, Christine Dobby and the others at The Globe and Mail, like Bob Fife and Steve Chase, who picked up on this story in May 2018 and before. They saw there was a lot going on and asked why 13 Canadian universities were systematically pulling IP out of the universities while the same time, later that year, the two Michaels were detained for over 1,019 days.

It's something that we need to be acutely aware of, and the provinces are integral to making sure that this is successful.

The Vice-Chair (Mr. Corey Tochor): Thank you.

Now we're moving on to our last two-and-a-half-minute round. From the NDP, we have MP Johns.

Mr. Gord Johns: Thank you. I'm going to stay on that same thread with Mr. Hinton.

We've heard witnesses say that we need to be on guard not just against China, but against many countries. In terms of ensuring the best way to ensure IP security, we talked about how it can't simply be fewer banned entities—my colleague just asked about that—but that researchers should be given the training on how to spot security threats.

Mr. Hinton, can you talk about that? Who should lead, in terms of ensuring that training takes place?

Mr. Jim Hinton: There's a great program, IP Ontario, that began relatively recently, about a year ago. It is working collaboratively. My friend Peter Cowan heads that initiative. On the IP front, it's working to improve IP literacy across the province, both within companies and at the institutions.

A similar approach would be working to build programming by building off of those best practices globally. We have these great experts here. Build off of those, customize it for Canada and then deploy it.

Really, I think it's the federal and provincial governments working collaboratively, as well as the universities. They do education better than anybody else in the country, so who better to be involved with building education programs than the institutions themselves, since they need to learn more and be better aware of the issues?

Mr. Gord Johns: Can we go back to the recommendation made by the special committee on the Canada-People's Republic of China relationship, in terms of the report of threat to Canadian sovereignty? It reads:

That the Government of Canada explore the possibility of issuing security clearances for key individuals in the non-profit sector, private sector, universities, and research institutions to allow them to receive comprehensive briefings from Canada's security and intelligence agencies so that they could take appropriate steps to protect their intellectual property.

Mr. Hinton, could you speak about your thoughts on that recommendation?

Mr. Jim Hinton: Knowing CSIS and the great work that they do, I know a lot of the information today is really one way. They gather information and evidence and then they pull it back. Have some of the information come the other way and share what it is and how to approach it, as Kevin pointed out. Share what behaviours they should be on guard for and how to manage that.

Really, with a lot of the institutions that I work with, it's inventor-owned policies. The researchers themselves are left a lot times to their own devices. It's recognizing that and then building programming resources to be able to initiate that.

The Vice-Chair (Mr. Corey Tochor): Thank you.

We are concluding our round of questioning, but as the chair, I will take the prerogative to ask one question of Mr. Hinton.

You were talking about Huawei and the IP that was filed that was paid for by taxpayers. I just want to confirm the times. We know

that the two Michaels were picked up, I believe, in late 2018. You're saying four years later IP was registered that was taxpayer-funded and that any profits or protection of that patent would go to the benefit of China, paid for by Canadian taxpayers. Is that correct?

• (1735)

Mr. Jim Hinton: From my understanding, that is absolutely correct. I have a patent in front of me here today that was published in September of 2023. It lists Huawei Technologies Canada and the governing council of the University of Toronto. I mentioned others. There are other examples. In many cases, and likely in this case, all of the commercial rights to this property that was invented by Canadian academics and funded by Canadian academics, at least in part, are owned exclusively by Huawei.

If a Canadian company wanted to do what Canadian taxpayers paid for through the invention that happened at the University of Toronto or the other 19 research institutions, they would be legally prohibited from doing so under the patent. We created a property and gave it to Huawei so they could sue us and prevent us from doing this, and this is just the tip of the iceberg.

The Vice-Chair (Mr. Corey Tochor): Just to clarify on this technology, it's horrendous to think that the Canadian taxpayers have paid for that and that the benefit is going to flow out of the country.

I have one follow-up question. Obviously it's Huawei, so it's communication. It's technology that could be used against us. I'm assuming that it's not just for financial gain for their country but also for espionage and other questionable uses. Am I right?

Mr. Jim Hinton: You are, and those relate to 5G, something that we have to use. I pick up my cellphone here, and it's in 5G. I'm paying royalties under that patent licence on standard essential patents to use that property, again after having paid for it as a Canadian taxpayer. There's a problem there.

Then when it gets into artificial intelligence—and some of these technologies relate to that—of course AI can be used for nefarious purposes. We've seen certain published patents for the automatic profiling of ethnic minorities. These things are very problematic. The faster you can image somebody from a street camera and understand their ethnic profile, the more that can be used in nefarious ways—

Ms. Lena Metlege Diab (Halifax West, Lib.): Mr. Chair, we're losing a lot of time from the next study. If it was the same study, I may not be—

The Vice-Chair (Mr. Corey Tochor): We will endeavour.

I want to thank the witnesses for being here today. I apologize for cutting you off. To the members, we like to hear the witnesses fully, and I don't like cutting off MPs unless they are gaming the system to get more time in.

With that, we're going to conclude our panel. Thank you again. We'll stand suspended and we'll set up the next panel.

Thank you very much.

• (1735) (Pause)

(1740)

The Vice-Chair (Mr. Corey Tochor): Thank you so much. We're going to get started on our second panel.

Today we have three witnesses. We're going to start with the University of Manitoba and Dr. Susan Prentice.

The floor is yours for five minutes.

Dr. Susan Prentice (Professor, University of Manitoba, As an Individual): Thank you very much for the opportunity to address your committee on pay inequity for systemically marginalized academics. I commend you for studying this issue, which persists despite decades of evidence.

To situate my comments, you may wish to know I'm one of the eight faculty who successfully launched a human rights complaint against inequity in the Canada research chairs program and that I have written and published about systemic discrimination in higher education. From 2016 to 2019, I was co-chair of a University of Manitoba joint committee on gender-based salary differentials.

Joining me is Dr. Tina Chen, the inaugural vice-provost of equity at the University of Manitoba. Dr. Chen was recently awarded the first-ever Robbins-Ollivier Award for Excellence in Equity for a project on dismantling ableism and promoting equity for persons with disabilities through institutional action and accountability. Dr. Chen was also a member of that joint U of M salary committee.

I want to talk a little bit about the history at our university and I want to go back to 1994. In 1994, prompted by demands of the professors' union, the University of Manitoba studied pay gaps between male and female academics. A gap was found and a flat 2.84% pay increase to base salary was ordered for all women faculty. That award was paid out over two years, did not include any back pay and made no pension corrections.

Later, an unfunded research team that included me re-examined faculty pay, and we found gaps. Our paper was published in 2011. That prompted pay fairness to become a bargaining demand in 2016 when the joint committee was struck.

I want to talk about this committee. Our committee's work was, regrettably, restricted only to women faculty, and we did not disaggregate our data. Our report was only on one axis of discrimination, and even that was treated as a binary. These are real limitations, but let me tell you what we found nonetheless.

Our 2019 report found very different wage profiles for women and men in faculty and instructor ranks. Long story short, tests of statistical significance were deemed necessary, and our results did not prove statistically significant, despite being highly suggestive. Our report did find statistically significant differentials in the time to promotion to full professor—a full 18 months between women and men. We learned that from year 12 onward, women were 15.5% less likely than men to hold the rank of full professor. While all women are less likely to be promoted to professor at year 12 and beyond, the lower likelihood is particularly pronounced at our medical campus, as well as in science and engineering.

Our joint committee made seven recommendations. Among them were annual salary scrutiny and a written report of such analyses at least every five years. We recommended study into career progression to understand why women are 15.5% less likely than men to be full professors at year 12. We recommended qualitative and survey research into male and female workloads, into women's slower career progress, into differences in employment past age 65 and other climate-related issues. We also recommended study into different dimensions of salary inequity, specifically into gaps in members' pension fund accounts, which, of course, affect lifelong earnings. To my knowledge, none of our recommendations have been implemented.

This very abbreviated history of sex-based differentials at our prairie university holds some lessons. I will argue our story is representative. Where salary gaps have been studied, the impetus is nearly universally a result of the volunteer work of researchers, faculty caucuses or unions, rather than management. Regular monitoring is rarely implemented, and there is little accountability. Such ad hocery would be mitigated if there were more robust Statistics Canada reporting through the University and College Academic Staff System survey. For this to be meaningful, institutions would require more internal attention and capacity to monitor equity data, likely through dedicated funds, including a Dimensions stream.

There are two key points I would ask you to take away.

The first is that it's very clear that we need data on equity in order to take action. This includes, importantly, data for faculty with disabilities, a group of our colleagues who are rarely tracked or reported for complex reasons you may ask me about. A way to track this data for equity could be to enhance compliance requirements through the federal contractors compliance program and through a strengthened Employment Equity Act and Pay Equity Act.

• (1745)

A second key point is to underscore that under austerity, most Canadian universities have seen shifts in their ratios of tenure-stream appointments and a rise in non-standard academic employment. Dubbed "the precariat", these colleagues are disproportionately racialized and gendered. Such work exacerbates precarity for women, for indigenous people, for 2SLGBT+ people and for faculty with disabilities. Faculty renewal is essential in order to be able to offer meritorious colleagues fairness and full-time employment.

I hope you are aware that national data tells us that the numbers of those who are working in post-secondary education but who are off the tenure track have grown by 500% in the last 20 years. Across Canada, full-time university student enrolment has grown by 18% from 2010 to 2020, but full-time faculty numbers rose by just 6% in the same period.

With these takeaways, and in preparing us for discussion, I'll conclude by underscoring that there is a fiction that the academy is a place of simple and pure merit, and that this fiction goes a long way toward explaining historical resistance to grappling with documented histories of exclusion, marginalization and systemic discrimination.

Despite it being 2023, there remain demonstrable barriers to equitable faculty salaries for professors of different genders and from systemically marginalized groups. Your committee is in a position to make recommendations that can help change that.

(1750)

The Vice-Chair (Mr. Corey Tochor): Thank you so much.

Next up, from the University of Toronto, we have Dr. Boon.

The floor is yours for five minutes.

Prof. Heather Boon (Vice-Provost, Faculty and Academic Life, University of Toronto): Thank you Mr. Chair.

Perhaps I should briefly introduce myself. I have been a faculty member at the University of Toronto since 1999. I served as the dean of the Leslie Dan faculty of pharmacy from 2014 to 2018. I currently serve as vice-provost for faculty and academic life, and I've done so for the last five years. In that role, I oversee faculty human resource matters, including faculty salaries at the university.

As noted by Susan, the issue of pay equity at universities in Canada and at peer institutions around the world has received significant study over the past decade and beyond. We are happy to see the committee taking up this issue. Hopefully, some of the findings that we are able to share will assist you in your deliberations.

I've provided to the committee a report from 2019 entitled "Report of the Provostial Advisory Group on Faculty Gender Pay Equity". It outlines the rigorous approach that we've taken at the University of Toronto to address this issue.

We developed a statistical model that allows us to identify the closest peer-to-peer comparisons of men's and women's faculty salaries, taking into account individual differences with respect to experience, field of study and a few other relevant factors.

For a bit of context before I provide the results of that study, at the University of Toronto we have two primary categories of faculty that have permanent appointments: the tenure stream and the teaching stream.

With respect to the tenure stream, our analysis found differences in salaries of men and women and found that they were primarily explained by experience in the field of study. After we controlled for experience and field of study, we also found that, on average, our tenured and tenure stream women faculty at the university earned 1.3% less than comparably situated faculty who were men.

Our analysis didn't find any significant differences between salaries of men and women in our teaching stream.

In response to this, effective July 1, 2019, every woman faculty member who was tenured or in the tenure stream at the University of Toronto received a 1.3% increase to her base salary in order to compensate for the difference that we found.

I want to share a couple of key lessons we learned in doing these analyses.

First of all, two key variables dramatically impact salaries and thus need to be controlled for in any analysis: experience and field of study. It's perhaps obvious to say that someone with 25 years of job experience is going to have a higher salary than someone with only one year of experience. Since newer faculty are more likely to be female at the university and more senior faculty are more likely to be male, you can't simply compare the mean salaries of all men and all women at the university, because that confounds gender and experience. Any analysis of salary equity must control for this.

Similarly, we must control for fields of study, because there are significant differences in salaries across different fields of study. For example, fields of management or law have higher salaries for faculty members than other fields of study, due primarily to market forces, which are at least partially driven by the fact that these faculty members could earn higher salaries in the private sector.

As Susan noted, we believe it's really important to review any salary analysis periodically. At the University of Toronto, we have committed to doing this review every five years. We are currently in the process of redoing our analysis to see if the changes that we made back in 2019 are holding. I don't have the results yet, but the preliminary analysis suggests that we do not currently have any differences in pay for faculty who are men and faculty who are women once we control for experience and field of study. We will be making this report public as as soon as it is completed.

A couple of other things I wanted to note are that any gender pay equity strategy needs to consider a range of things. One of those things is thinking about diversity in hiring. At the university, currently about half of all new hires in both our tenure and our teaching stream are women. We need to keep monitoring that to ensure that we are thinking very carefully about who we are hiring.

We also need to think about how we pay their starting salaries when we hire new people. At the University of Toronto, all new hires are approved centrally and their salaries are approved centrally, based on an analysis of the rank at which they are being hired, the time since their highest degree—which is a proxy for experience—and field of study.

We've engaged hundreds of faculty members and administrators involved in hiring or career review decisions in unconscious bias training, workshops and discussions. These evidence-based, faculty-led discussions have been vital in helping to keep issues of equity top of mind across the university in order to ensure the equity pay gap does not re-emerge now that we have rectified it.

I hope some of these lessons learned from our work are helpful in your ongoing deliberations on this matter.

(1755)

The Vice-Chair (Mr. Corey Tochor): Thank you so much for the testimony.

Now, for our first round of questioning, we have, from the Conservatives, MP Michelle Rempel Garner for six minutes.

The floor is yours.

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

I'll start with Dr. Prentice.

I want to give you a bit of a chance to expand on your recommendation for better data.

Do you have a more detailed recommendation the committee could consider on where that data gathering might fall within the federal government's purview?

Dr. Susan Prentice: Thank you for the question and the chance to clarify.

Under an enhanced federal contractors program, I think universities will be required to report more robustly. They would need to internally track the kind of data that would allow them to report to the federal government. I think that is one mechanism under your direct control. That's probably the biggest and most important one.

The other one-

Hon. Michelle Rempel Garner: Are you suggesting that universities would put together a standardized tracking system that would be reported through...what mechanism? Is it tri-council funding? What would it be attached to, in terms of federal government purview?

Dr. Susan Prentice: Well, the federal contractors program used to ask any university that did more than \$200,000 worth of business with the federal government to make a report. The threshold has gone up over the years. Through that requirement, there was a

mechanism by which there was accountability outside of the university.

One of the pressure points that I think need to be strengthened is that although Institutional autonomy needs respecting, there also needs to be accountability. Universities themselves, if required to report externally, will pay more attention internally.

Hon. Michelle Rempel Garner: Got it.

Dr. Susan Prentice: That's where I think the federal contractors program could be a tool in helping to mitigate pay inequity.

Hon. Michelle Rempel Garner: Thank you.

I'm enjoying questioning the leaders of my alma mater, so there's

Dr. Chen, part of what we're trying to determine in this committee is what sorts of recommendations could be used that are within federal jurisdiction. A lot of the issues that have been raised before us seem to be more institution-based or embedded within the provincial governments. I appreciate, for example, what Dr. Prentice just said.

On some of the matters that you raised, I'm wondering, again, whether there are specific action items within the federal government's purview that don't necessarily blur the lines between those jurisdictions. For example, the current Quebec education minister raised some concerns that the DEI standards for Canada research chairs are a bit of an incursion into provincial jurisdiction. What sorts of recommendations do you have for the committee in order to narrow that scope, perhaps, and avoid that pratfall?

● (1800)

Dr. Tina Chen (Vice-Provost, Equity, University of Manitoba): I think that's a very good question.

When we're talking about data collection and thinking about the federal scope, I would encourage everyone to think about the way StatsCan's disaggregated data action plan should be implemented nationwide with regard to the types of collection of data. The disaggregated data action plan is calling on us not only to move beyond gender-based or just sex data but also to think about where we are looking to identify systemic inequities—and to use that, then, to track the ways in which we work to narrow those inequities. Applying an expectation within all areas, including through post-secondary, that we're working in accordance with that disaggregated data action plan is a key part.

I'm also looking forward to some of us hearing the results of what UCAS, the Unis and Colleges Admissions Service, did in their pilot study. This was using human resources data and trying to create a more unified form. Now, this is one issue where there's an expectation or a sense that perhaps we'd be collecting the data around equity, diversity and inclusion—demographic data—in a consistent manner. I'm not sure whether all those who signed up as part of Dimensions have actually followed through on that and are collecting the same way, but I think this is another way of bridging together the national initiatives—things that are happening at the federal level—with what's happening locally.

Then, the other realm, I would say, is thinking about administrative data. How do we actually make those links to administrative data, much like in the health realms? How do we think about joining the systems so we're also not thinking about survey fatigue?

Hon. Michelle Rempel Garner: That's very helpful.

Other points that have stuck with me throughout the committee study have been Dr. Smith-Carrier's statement that men's earnings rise significantly with academic productivity, whereas women's do not.

Perhaps I will ask both VP levels at the University of Toronto as well as the University of Manitoba. Is this a statement that still resonates within the data you have at your institutions?

I will start with the U of T, the centre of the universe for western Canadians.

Prof. Heather Boon: It's not the centre of the universe, but I will say that our analysis doesn't show that at the moment. The analysis we did quite clearly shows we no longer have a difference between men's and women's salaries at the university. The difference we did find in 2019 was quite small.

I don't think it-

Hon. Michelle Rempel Garner: I'm sorry. I'm running out of time.

Are intellectual property ownership and technology commercialization factored into the conversation of gender pay gaps that you're aware of?

Perhaps I will go back to my colleague at the University of Manitoba in her new role as a DI lead, a Dimensions initiative lead, and ask whether or not that is something she has thought about.

Dr. Tina Chen: I don't-

The Vice-Chair (Mr. Corey Tochor): We're going to ask for that in written form. We're over time on that one.

Hon. Michelle Rempel Garner: Okay.

The Vice-Chair (Mr. Corey Tochor): Now it's over to the Liberal Party and MP Jaczek.

I would like to remind all members to have their mikes turned off when they are not asking questions in the room. Thank you very much.

The floor is yours.

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

Thank you to our three witnesses for all the work they have been doing on this very important question through the years.

I'm relatively new to this committee. I think it was you, Dr. Chen, who referenced the Dimensions initiative. As I understand it, this was administered by the Natural Sciences and Engineering Research Council, NSERC, for the three federal granting agencies, obviously providing a handbook to try to help post-secondary institutions to increase equity, diversity and inclusion in their environments.

I think, Dr. Chen, you made reference to this particular initiative and talked about renewing it. Perhaps you could elaborate a little bit on what, in your view, the federal government could do to improve this existing initiative.

Dr. Tina Chen: Thank you for that question and for that reference.

I'm particularly interested in what was launched just last year in trying to think through what it would mean to modernize the university and the college academic staff survey, particularly thinking about EDI and the inclusion of part-time faculty, part-time instructors. I think Dr. Prentice already spoke to how that's a big part of the pay equity considerations at the moment.

In order to lead this, we really need nationally, with the pilot that was launched, to try to include this and think about what that would mean. I think it will yield for us a number of considerations as we look across the nation. We know that in the hiring process, our salaries are driven not only by what's happening within our institutions but obviously also by their relation to each other, and this study continues to need to be funded.

I think we also know that the Dimensions initiative and certainly the StatsCan work that we all rely upon are also dependent on the long-form census, asking extensive questions and funding the labour surveys and doing all of that work. I think with the funding particularly over the last two decades, sometimes programs have been pulled back, and then they are reintroduced. This really creates barriers to that kind of robust data that's necessary for us to locate the specific institutional responses.

I will stop there. I think the others probably think quite a bit about Dimensions as well, so they may also have input.

• (1805)

Hon. Helena Jaczek: Thank you so much.

I am intrigued by the federal contractors program. We did receive a submission from the Canadian Association of University Teachers dated September 2023. The recommendation there is to strengthen the federal contractors program.

Dr. Prentice, perhaps you could be very specific as to what you would like to see in terms of strengthening the federal contractors program.

Dr. Susan Prentice: This is a long-standing program of the federal government. I think it dates back nearly three decades now.

Under the federal contractors program, any university that has a contract with the federal government is required to report. Contracts through tri-council and other grants are the way most of us fund our research and the way many universities find other operating streams. We are required to report, and one of the requirements for reporting has included.... Again, it began with gender-disaggregated data, but it could—and should, I would say—be strengthened so that it includes other axes of inequity.

What this will require is for universities to meet reporting requirements and the kind of accountability that comes from external scrutiny, which pushes, nudges and coaxes equity-enhancing behaviour inside universities.

The threshold was moved too high. At one point, it was \$200,000. It's now up to over \$1 million on each one, so the threshold could come down. The CAUT probably has a closer handle on how this operates nationally, but I'm aware that at the University of Manitoba, historically some of the women's groups on campus had to go to the federal contractors compliance reports to learn about what was happening inside our own universities.

The creation of data for equity has a very positive cascade effect that can allow other people to use it.

Hon. Helena Jaczek: Thank you.

There was a third recommendation in this submission to facilitate the renewal of faculty.

Dr. Boon, perhaps you could address this particular area and elaborate a bit on what precisely the recommendation would mean for the federal government.

Prof. Heather Boon: Sure. As I mentioned, we've been thinking a lot about this. When we do have the opportunity to hire, we're ensuring that we are doing searches that are targeted at encouraging the widest range of people to apply, making sure that we are tracking who is successful in our searches and thinking a lot about whether there any unconscious biases creeping into our processes, to do our best to ensure that we're being open and welcoming to all.

As we look at whom we're bringing into our community, we know, as I mentioned earlier, that in the last 15 years or so, we've almost reached gender parity with respect to women and men at the assistant and the associate professor ranks. That reflects hiring over the last 15 years or so. In the last few years that I've been in this role and looking at whom we're hiring each year, we know that we are hiring about 50% women each year, sometimes slightly over that, into our continuing tenure stream and teaching stream positions.

We are also thinking a lot about other axes of diversity and enacting programs to ensure that we are welcoming and hiring a wide range of faculty.

Those are, I think, all things that are really important as part of any program in this space.

(1810)

Hon. Helena Jaczek: Thank you so much.

Mr. Corev Tochor: Thank you.

We'll now go to the Bloc for six minutes. Maxime, the floor is yours.

[Translation]

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

Welcome to the witnesses joining us for this study.

Ms. Chen, as you no doubt know, pay equity and university administration fall largely under the jurisdiction of Quebec and the provinces. Some federal programs address equity by imposing equity, diversity and inclusion criteria, without necessarily addressing pay equity per se.

I'd like to keep the focus on what falls under federal jurisdiction, including the federal contractors program, the three granting councils and the Canada research chairs program. I'm curious to hear your views.

As I see it, there is equity recognition for those who belong to under-represented groups, but are there really mechanisms to ensure pay equity in programs that the federal government is directly responsible for?

[English]

Dr. Tina Chen: Thank you for your question.

When we are talking about pay equity, I think we are thinking about the various ways in which compensation happens in these fields. When we think about those programs, whether it's through the Canada research chairs program or through some of the granting councils, to my knowledge, there are not many studies that look at the gender inequities in the types of awards that are being made.

What we do know from research is that there are, in fact, discrepancies and inequities in what people will ask for in their research requests. Particularly, those who are systemically marginalized do not ask for the biggest sums of money. They don't go after the biggest grants. If they tell you it's a \$300,000 to \$500,000 request, many will ask for what they think is the minimum necessary to do it, and they will proceed to do that work, whereas those who situate themselves in places of privilege will often ask for more. They will go to the maximum amount.

In light of the previous question, given the way that many institutions operate—they start to talk about the value and about merit pay and give rewards to people that are often based on the number of dollars that come in—there are ways of making us more aware of the ways that inequities are reflected, not just in terms how many awards are given out but, particularly across fields, the ways that they are valued.

Moving many of the practices out of the Canada research chairs program and thinking more about how that goes across all of the tri-council funding as well would be really significant steps, because the the ways that inequities are experienced in the workplace at post-secondary institutions are not just about pay equity and the take-home salaries that are paid by the institutions; they're actually about the ways in which the work conditions get framed. That is an important way to also begin to think about some of those issues in terms of what's under federal control.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you very much, Ms. Chen.

I'm going to turn to Ms. Boon now. I'm going to ask my question about programs under federal jurisdiction in a more specific way.

Do you think requirements are in place to really ensure pay equity among university faculty members who are of different genders or belong to equity-seeking groups? When the federal government funds Canada research chairs through the three granting councils or funds other organizations via the federal contractors program, would you say there are mechanisms in place to ensure this equity? [English]

Prof. Heather Boon: As Susan mentioned, certainly with the contractors program, we do reporting. It's the same with some of the chairs' programs.

I'm trying to think creatively about other things that are under the federal government's control, and one of those would be the salaries of graduate students, post-doctoral fellows and young researchers. Part of the challenge is that we don't have as many women and diverse individuals in the pipeline as we would like to hire, and I do think that's under the federal government's control.

If we can encourage women and others to engage early and remain engaged in scientific and research pursuits, we can work together to build that pipeline of scholars across a wide range of fields.

That's something else I think the federal government could seriously make an impact on.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you, Ms. Boon.

Ms. Prentice, do you have anything to add about the requirements in place? What can the federal government do better to improve gender pay equity among faculty members, as well as equity around access, of course?

• (1815)

Dr. Susan Prentice: Thank you for your question.

To make sure my comments are understood, I prefer to answer in English.

[English]

The actual allocation of awards is one of the most important things the federal government can do, and I feel very proud to have been part of a very long fight to ensure that there is not a leaky pipeline in the awarding of Canada research chair positions, for example, so that women and men get their fair share, so that racialized and Indigenous people and colleagues with disabilities get their fair share.

The disability data is less available. Tina perhaps will be able to speak to that.

It's true that, directly speaking, once a chair is appointed, it's up to the individual institution to set the salary, but it certainly falls within the ability of the federal government to influence the award-

ing of the awards, and in fact I think it is a completely appropriate policy that universities that fail to meet equity and diversity targets will find their future chairs withheld until they can meet the objectives. I think that is an appropriate mechanism for the federal government, despite the controversy it has raised in Quebec.

The larger question, of course, is that we're trying to find a light hand that recognizes both institutional autonomy and a federal interest in equity. This is where some of these intermediate mechanisms of data and reporting go a long way to helping both parties build more fairness.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

Now we will move on to the last six-minute round.

MP Johns, the floor is yours.

Mr. Gord Johns: Thank you all for your really important testimony.

Dr. Boon, maybe you can help me with this.

One-time pay adjustments are sometimes given to faculty to address inequity at several higher learning institutions or universities; however, it's also seen as a band-aid rather than as a real solution.

How can institutions meaningfully address pay inequities they identify among their faculty?

Prof. Heather Boon: Thanks for that question.

You're absolutely right. If we don't get to the bottom of the issue of why the pay inequity is there in the first place, then we haven't corrected the problems.

That's why I said that fixing the problem has to be part of a broader strategy that includes thinking very deeply about unconscious bias throughout the system. We look at, for example, starting salaries to ensure that with new hires we're not recreating a problem. We need to look at other points—for example, merit assessment, promotion, tenure, all of those things, and Susan mentioned some of this as well—to identify whether in any of those academic review processes we also have bias.

We need to think about what we mean by excellence and merit in academic settings, and be conscious that there are many different ways one can demonstrate excellence.

That's something that this concept of unconscious bias.... We need to start a dialogue and maintain a dialogue that is based on the evidence—and there is a lot of evidence in the literature about what some of these biases are—and bring them to the forefront and catalyze regular conversations across the faculty and for all those involved in making these decisions along one's career path. That's the way, ultimately, to ensure we're not recreating a problem over time.

Then obviously it's assessing regularly, which I think Susan mentioned as well. You have to keep redoing this analysis to check.

Mr. Gord Johns: Okay.

I want to go beyond that and expand on the lack of data.

Dr. Prentice, maybe you can help. You talked about StatsCan having an important role in that capacity. Maybe you can talk about what role an institution should also play.

Dr. Susan Prentice: My employer is the University of Manitoba, so they're the ones that set my salary.

I'm lucky to have a union—we're professors who are unionized—so the union has a role in this too, in bargaining for equity.

I'll use my own career as an example. I was hired in 1993, so back in the early nineties I had part of that 2.84% I talked about. I've made two individual anomaly awards, which have both been successful. I still have pay inequity—but it's not statistically significant—compared to some of my male colleagues. This is clearly on my institution.

If these data are required to be reported, if they need to be made accessible and transparent, if they're presented in disaggregated ways, they provide the kind of evidence and fuel to allow actors on their own campuses to pick them up and to push their own institutions.

One thing I said, and I think it's true, is that to my knowledge, every time there has been a study that has looked at inequity in pay, it has been led by those who have been affected by it. It does not primarily start from the top. If Heather has been able to implement that at the University of Toronto, hats off to her. Almost always this is done by people who are seeking to end the unfairness, so that's where they start.

(1820)

Mr. Gord Johns: Thank you.

In *The Equity Myth: Racialization and Indigeneity at Canadian Universities*, by Frances Henry et al., the authors write that generally speaking, more racialized faculty perceive that tenure and promotion are based on soft metrics rather than hard metrics, like publications or winning grants. The opposite pattern is largely found with perceptions about the administrative and committee appointments and hiring. Consistently across all measures of perceptions, fewer racialized faculty agree that equity considerations are a factor affecting tenure, promotion, administration and committee appointments, and hiring.

Beyond pay, how does inequity affect the experiences of faculty at Canadian universities, including tenure, promotion, appointments and hiring?

Maybe you can answer that as well, Ms. Prentice.

Dr. Susan Prentice: Thank you.

At my university, for example, my job says 40% of my time is teaching, 40% of my time is research and 20% of my time is service. I don't think it's always understood outside the academy that professors' jobs are very rich and complex.

For example, when it comes time for promotion to full professor at my university, a person's service dossier will not be taken into account. In my faculty, we only look at teaching and at publications. Even though 20% of faculty time is supposed to be spent on service—which means collegial self-government, curriculum committees, reviewing for journals, sitting on senate, sitting on boards

of governors and the rest-this kind of work does not get factored in

We know from a lot of evidence that minorities—originally women, but now increasingly indigenous colleagues and others—do a disproportionate amount of service work, and yet the institutional reward structure doesn't recognize this fairly. I think one of the things we need to do to recognize excellence—and this is to pick up Tina's point—is to recognize excellence in all the domains of faculty work.

The 40/40/20 that I gave you is a tenure-track colleague's work-load. In a teaching stream, it might be 80/20 teaching/research. The point will be that this work is often disproportionately unfairly distributed, and these mechanisms to fully assess the workload aren't always very well done.

It's why at my university, for example, we can see that despite everything, a year and a half—18 months—separates promotion to full professor rates for women and men, and that at year 12, women are 15.5% less likely than men to be full professors, perhaps because the excellence in their comprehensive workload is not recognized in the way that it might be for other colleagues.

The Vice-Chair (Mr. Corey Tochor): Thank you so much.

We are now onto our five-minute round of questions, leading off with MP Lobb for five minutes.

Mr. Ben Lobb: Thanks very much, Chair.

My first question is for Professor Prentice.

At the University of Manitoba, what's the HR department say to you when you present your complaints? When the professors say 40/40/20 is not fair, do they not say anything back to you? What's their point?

Dr. Susan Prentice: I've personally never had to deal with the HR department. Most of the time when we discuss our workload, we're dealing with the department head or a dean or perhaps a vice-provost.

The larger question I'm asking universities to address more carefully is to monitor workloads and to recognize that some colleagues do different kinds of work. My indigenous colleagues, for example, spend enormous amounts of time mentoring indigenous students at the University of Manitoba. This is absolutely critical to student success. If they spend more time in teaching and more time mentoring but they perhaps publish less, are they doing a less good job?

Mr. Ben Lobb: Fair enough.

There are thousands of these administration people who work at universities. What are they doing? I look at it and I say, what's HR doing? They should be right in there talking to the deans and everybody else and saying this isn't right and let's get it fixed. Is that not happening?

• (1825)

Dr. Susan Prentice: I think my colleague is trying to weigh in on this.

Mr. Ben Lobb: Okay, let's go.

Dr. Tina Chen: I think in an academic setting, this is where we need to think about the different responsibilities.

Here at the University of Manitoba, as many other places, the responsibilities for overseeing this comes through the provost's office. I would say here, at the University of Manitoba, there's a lot of work that is being done, such as around setting new guidelines for hiring.

Again, I think this is very similar to what Professor Boon was just speaking about in the University of Toronto situation as well. Ultimately it's the provost's office that monitors to ensure that equity-based approaches are part of our hiring processes, that we're having and entering into those discussions among people about what appropriate workloads are, and also deans report to it on what's happening.

I think what we're really addressing in terms of systemic inequities at the universities now is how we shift the culture so that the different departments—the units, those who are doing the hiring—are creating the very kinds of cultures that support equity.

I don't think we're really at the moment of "Can we hire those who are systemically marginalized and under-represented?" We can hire them, but are we going allow them to thrive—

Mr. Ben Lobb: What does HR do? Is there an HR department at the University of Manitoba?

Dr. Tina Chen: Human resources oversees a lot of the staff appointments. They are doing the work in terms of addressing systemic inequities for staff, but faculty hiring actually happens through the provost's office, and that's where the monitoring happens.

Mr. Ben Lobb: What's the dean or the chancellor of the school doing? Shouldn't that individual take charge and say we have to fix the system here?

Dr. Tina Chen: Yes, definitely. At the universities we see this happening at all levels. I work in the provost's office and I oversee the equity strategies. The provost messages them. We work with the deans for constant education and for monitoring.

What you want to see is a way of reporting and bringing everyone together at all the levels. Some units are more successful. As people have talked about, it's a bit of a carrot and stick as to where that's happening. However, on its own, as we sort of unfold those, we're working in collaboration.

What you have to do, though, is to make sure you're creating the spaces not only institutionally but also nationally with respect to what the expectations are. That's because it's very hard for any unit or faculty member to say, "Well, my job is to prioritize this type of work. I'm really invested in community-based work and teaching, but I can't get a national grant because they don't recognize it."

Mr. Ben Lobb: I'm just a regular guy. I'm from a small town. I look at this and the problem here is obvious. You have deans, and

they don't report to HR. You don't know what the president of the university is doing. It's all right in front of their faces.

You have to help me here on this, because I see the problem and how HR can't work with the departments to set it up and make it right and how the board of directors of the university.... I'm not just picking on the University of Manitoba. It's almost like it's an abdication of their responsibility. You have all these professors trying to get a fair deal, and it seems to me as though the administrations are doing nothing. I don't know. Maybe I'm wrong. What do you think?

Dr. Tina Chen: I would actually just say that I do believe you're wrong on that.

Mr. Ben Lobb: Okay.

Dr. Tina Chen: I think there's a lot of work being done, but we are working and dealing with what are centuries of institutional sexism, misogyny, transphobia, homophobia and racism. They're embedded in how we work and how we value people's work.

When that becomes embedded in a system, it's not simply one person saying that we should pay him or her better, because all of the ways in which society also values particular work—where it thinks that lies, where we think appropriate bodies are placed and whose bodies have value—become part of our institutions. It's not a lack of reporting and accountability, then; it actually requires an entire cognitive shift in how we see the world.

I'm mindful when I enter any room: Are there, in fact, people who are from racially marginalized groups present and being given voice to speak? How often are we hearing those voices? How often are we hearing the voices of the non-binary people speaking about inequities, or are people simply asking us, saying, "How come you can't solve the problem?"

I think this is where we have to think about the systemic issues that are at the site and also understand that in a university, it is in fact the deans. There are numerous levels of reporting, but as we build those cultures, we have to also be valuing: It's not just what you pay and what you agree to pay people, but also how you treat them.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that. We're a minute over.

We're moving on to MP Diab for five minutes.

Ms. Lena Metlege Diab: Thank you very much.

Professors, thanks to all of you for coming and giving us testimony.

Ms. Chen, I am learning a lot from your testimony. I very much appreciate the candid responses you are giving. We're studying a gap in this particular field, but I'd say gaps probably exist in so many fields across our society.

I have a question for Professor Boon. I was very excited to hear of your study, and I can't wait for 2024, when you release the statistics you're talking about.

You talked about two streams and tenure and teaching and how there were very minimal differences and no difference, actually, in the teaching between the two. I'm wondering if you account for part-time faculty, faculty on contracts, librarians and clinical faculty. Before you answer that, I'm also wondering about the following: You've now said you've instituted a hiring process in which about 50% are women. When was that instituted, and what do you currently have in terms of percentages between the two genders—or the different genders, I guess—in the university? That's just to see whether the statistics you have looked into, showing that there was a minimal statistical difference, represent a fair percentage of the gender.

(1830)

Prof. Heather Boon: We have these results publicly available and we refresh them annually. I don't know the exact amounts, but we are very close to gender parity in both our assistant professor and our associate professor ranks. In the full professor rank, which is the senior scientists, we have more men than women, and that's legacy hiring that was done more than 15 years ago, so it will take a while before we reach parity at that level.

We haven't instituted a rule that we have to hire 50% women. What we have done is spend a lot of time asking people to think deeply and talk about that culture that Susan and Tina mentioned. How do we value people's careers and trajectories? How do we value the things they have done? What does excellence look like, ensuring that we are taking a broad perspective of that and thinking about people who may have non-traditional career paths, for example, and those kinds of things, and making a very deliberate attempt to encourage people with diverse backgrounds to apply for our ads?

Lo and behold, when you have a diverse applicant pool and you think broadly about what excellence looks like, you hire approximately 50% men and women, and other diverse candidates as well—

Ms. Lena Metlege Diab: I have another question for you within the couple of minutes we have.

We know the pandemic has significantly affected, I would say, more women in the workplace, particularly those who have small children. How do you account for that and the fact that women have babies? That's a fact of life, and when they do, they take time off.

How do you account for that in university settings with respect to promotions, tenure and the issues we're talking about?

Prof. Heather Boon: We have very generous leaves for women, because you're absolutely right: When a woman takes a leave, her tenure clock stops. In the university, you have a maximum number of years in most universities, and you go up in your sixth year for this tenure review. When someone is on leave, we stop the clock, so that year doesn't count. Many women and men take more than one leave.

We also try to normalize leave. People takes leaves for all kinds of reasons. It can be for child-rearing. It can be for illness. We remind our colleagues, when someone comes up for tenure, that no, they didn't get eight years, and therefore they should have more publications. They had the same number of years of active career work as everyone else.

Again, it's normalizing how many people take leaves. Yes, women take more, but about 25% or so—that's a rough estimate—of our

faculty have taken at least one year of leave and stopped the tenure clock when they went up for tenure. We remind colleagues of that.

That's how we-

Ms. Lena Metlege Diab: Professor Chen, how do you deal with it at the University of Manitoba?

Dr. Tina Chen: I would say that our policies are quite similar to what Heather said. In particular, it's part of our collective agreement with the union, so we have a very well laid out process. I think the normalizing of leaves is a key part of that, and I think you mentioned it earlier about when you were asking about full time. This is where we see the difference in types of experiences.

We can normalize leaves and we can think about support for people who are taking leaves for a variety of reasons here at the University of Manitoba. We're also very particularly concerned about indigenous faculty and those who are in ceremony or have different types of child care and family responsibilities, and the way that shapes their lives.

Where we don't have a similar way of addressing the inequities or the way people's personal lives impact the workplace, and how COVID has exacerbated some of that, is with the "precariat"—the part-time instructors—and those inequities are indeed getting bigger. The evidence isn't fully there, but we all know what's happening.

(1835)

Ms. Lena Metlege Diab: Thank you very much.

The Vice-Chair (Mr. Corey Tochor): Thank you.

Now we'll start our final round. We're going to do a minute apiece.

First up, from the Bloc, is MP Blanchette-Joncas.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Chair. I'll be quick.

Ms. Prentice, during the last round, I asked you how the federal government could do a better job through its programs or requirements. Now I want to ask you the opposite question.

What can universities, provinces and Quebec not do on their own to ensure pay equity among faculty members? What elements require the federal government's action?

[English]

Dr. Susan Prentice: Thank you. I appreciate your posing the question backwards. I think that's an intriguing way to go.

It's very clear that universities are employers, but I'll take this last minute to say that they're also teachers. One of the groups we haven't talked very much about right now is our graduate student cohort.

One of the immediate things the federal government could do is ensure that a student receiving a tri-council stipend for graduate studies who takes a parental leave—a man or a woman, whether they take six, 12 or 18 months—continues to be paid during that leave. While a professor will get pay, a graduate student might get time but no money. That's one thing that could come federally.

The Vice-Chair (Mr. Corey Tochor): Thank you so much for that.

We'll now move on to the NDP. We're going to have MP Johns for one minute.

[Translation]

Mr. Maxime Blanchette-Joncas: Mr. Chair, if I may, I'd like to ask Ms. Chen and Ms. Boon to get back to the committee in writing with an answer to my last question. I would appreciate it.

[English]

The Vice-Chair (Mr. Corey Tochor): Absolutely.

MP Johns, the floor is yours for one minute.

Mr. Gord Johns: On May 1, the people behind Canada's scientific research walked off the job. Thousands of graduate students and post-doctoral fellows from 49 universities and scientific institu-

tions were protesting the lack of a wage increase in 20 years. Not only does the low real value of Canada's graduate scholarships and fellowships force our best and brightest to live in poverty, but it causes harm.

Dr. Prentice, could you expand on how this underfunding impacts academic pay inequity?

Dr. Susan Prentice: It's true. We expect graduate students to spend years—two years for a master's degree, and between four and six or more years as a Ph.D. student—to get the highest academic qualifications, and we pay them shamefully. By "them", I mean families without money who can't supplement, people without partners, people who are already disadvantaged and people whose living costs are higher perhaps because they have children or additional costs. They are all disadvantaged. Increasing the stipends that we pay to the best and the brightest who are on their way to graduate degrees is a very important step.

The Vice-Chair (Mr. Corey Tochor): Thank you so much to our witnesses for being here for the questions from the MPs.

We are right on time. We're going to adjourn. Is the will of the committee to adjourn the meeting?

It is. The meeting is adjourned.

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

SPEAKER'S PERMISSION

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

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

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

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

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

PERMISSION DU PRÉSIDENT

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

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

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

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