



General Faculties Council  
**RESEARCH AND SCHOLARSHIP COMMITTEE**  
Approved Minutes

November 23, 2023, 2:00 p.m.

AD 167 (Governors Boardroom)/Zoom

***Voting Members***

Robert Thompson, Co-Chair Designate  
Sheri Madigan, Academic Co-Chair  
Sandra Amin\*  
David Anderson\* – left during Item 5  
Stephanie Bishop  
Michael Hill – arrived during Item 4  
Kris Innanen  
Shelly Russell-Mayhew  
Alberto de Salvatierra  
Piers Steel\*

***Non-Voting Members***

Hamid Habibi\*  
Cristina Rai\*

***Secretary and Scribe***

Elizabeth Sjogren

***Regrets***

Faizal Abdul Careem  
Raafat El-Hacha  
Aamir Jamal  
Kirsten Neprily  
Thomas Oldenburg  
Raylene Reimer DeBruyn  
Mary-Jo Romaniuk  
Rudiger Tscherning  
Lorraine Venturato

***Guests***

Megan Lee, Director, Quantum City – present for Item 5  
Lorna Very, Executive Director, Office of the Vice-President (Research) – present for Item 4

*\*Attended virtually*

---

The Co-Chair called the meeting to order at 2:09 p.m. without quorum. Per the Terms of Reference, the Committee proceeded with Items 1 and 2 and began Item 4. Quorum was achieved at 2:25 p.m., during Item 4, and the Committee subsequently returned to Item 3.

**1. Approval of the Agenda**

**Moved/Seconded**

That the Agenda for the November 23, 2023 Research and Scholarship Committee meeting be approved.

**Carried**

## **2. Remarks of the Co-Chair and Academic Co-Chair**

The Co-Chair included the following in his remarks:

- Five University researchers have been recognized with 2023 ASTech (Alberta Science and Technology) Awards: Yang Gao, Schulich School of Engineering (Best in Sector: Aerospace), Hadis Karimipour, Schulich School of Engineering (Best in Sector: AI/ML Advancement), Elise Fear, Schulich School of Engineering (Best in Sector: Medical/Healthcare/Pharmaceuticals), Kathryn Birnie, Cumming School of Medicine (Leadership/Equity Diversity and Inclusion: Women in Innovation – Research), and Sumantra Ghosh, Cumming School of Medicine (Leadership/Equity Diversity and Inclusion: Early Adopter of Innovation). Two University alumni were also recognized with 2023 ASTech Awards: Mohamed Elhabiby, President, RoboGarden (Best in Sector: Social Innovation/Educational Technologies), and Pat Derkacz, Mechanical Engineer Manager, Excir (Best in Sector: Environment/Water/Air)
- The qConnect 2023 summit was hosted by the University on November 16-17, 2023. The event brought together quantum creators and users, and was sold out at 330 attendees.
- The University of Calgary and the University of Alberta co-hosted the national 2023 Research Security Conference: Mitigating Risk in a Changing World on October 26-27, 2023. On November 24, 2024, the provincial government is launching a new research security hub and spoke model to support research security across the Alberta's post-secondary sector.

The Academic Co-Chair included the following in her remarks:

- Seven University researchers have been appointed as Fellows of the Royal Society of Canada: Frank Cheng, Schulich School of Engineering, Carolyn Emery, Faculty of Kinesiology, David Hodgins, Faculty of Arts, Nicole Letourneau, Faculty of Nursing, Jennifer Love, Faculty of Science, Venkataraman Thangadurai, Faculty of Science, and Marcello Tonelli, Cumming School of Medicine. Five University researchers have been elected to the Royal Society of Canada College of New Scholars, Artists and Scientists: Marie-Claire Arrieta, Cumming School of Medicine, Gina Dimitropoulos, Faculty of Social Work, Kirsten Fiest, Cumming School of Medicine, Joe Harrison, Faculty of Science, and Aaron Phillips, Cumming School of Medicine.
- The University has received two new Canada Excellence Research Chair (CERC) positions (*see Item 6*)
- The 2023 Highly Cited Researchers List, which lists the top 1% of cited global researchers and recognizes both quantity and quality, was released last week. The University has 15 researchers on the list, which is more than most institutions in the U15: Jean Addington, Cumming School of Medicine, Martyn Clark, Schulich School of Engineering, Andrew Hayes, Faculty of Arts, Craig Jenne, Cumming School of Medicine, Nathalie Jette, Cumming School of Medicine, Gilaad Kaplan, Cumming School of Medicine, Paul Kubes, Cumming School of Medicine, Sheri Madigan, Faculty of Arts, Remo Panaccione, Cumming School of Medicine, Johann Pitout, Cumming School of Medicine, Tamara Pringsheim, Cumming School of Medicine, Samira Siahrostami, Schulich School of Engineering, Marcello Tonelli, Cumming School of Medicine, Samuel Wiebe, Cumming School of Medicine, and V. Wee Yong, Cumming School of Medicine.

## **3. Approval of the September 21, 2023 Meeting Minutes**

Documentation was circulated with the Agenda.

**Moved/Seconded**

That the Minutes of the Research and Scholarship Committee meeting held on September 21, 2023 be approved.

**Carried****4. Research and Innovation Plan**

Documentation was circulated with the Agenda. Robert Thompson, Associate Vice-President (Research), presented this item.

**Highlights:**

- The proponent provided an overview of the Research and Innovation Plan, including noting that this is one of four *Ahead of Tomorrow* strategic plan implementation plans and that these will start as three-year plans. It was reported that three additional research support units are being established within the office of the Vice-President (Research) (VPR): the Strategic Initiatives and Research Intelligence Unit, the Industry Engagement Unit, and the International Research and Innovation Unit.
- Discussion included:
  - It will take time and resources to meet the University's goals
  - A barrier to research is that the post-award financial and legal set up processes can be slow. The proponent reported that the University Systems Enabling Research (USER) research systems oversight committee was re-established in 2019 with representatives from all Faculties, and that the USER committee should be made aware of post-award issues.
  - Many undergraduate students are keen to become involved in research, and there are a broad range of opportunities including through the Program for Undergraduate Research Experience (PURE) awards, Research Services, the Faculties, Libraries and Cultural Resources, and the Office of Experiential Learning. It can be difficult for students to easily find information on how to access opportunities for research, however, as information is not gathered centrally, and it was suggested that this could be mentioned in the Academic and Innovation Plan.
  - The nature of research support differs across Faculties and Departments
  - Prestigious international partnerships and larger grants will need adequate support
  - Initiative 1.1.c of the Research and Innovation Plan (to create pathways for career progression to faculty roles for postdoctoral scholars) requires more detail
  - Postdoctoral scholars will need to be paid adequately to participate in programs and industry partnerships, such as described in Initiative 5.1.c (to develop a Research and Innovation Fellows program to attract 50 innovation-focused postdoctoral scholars per year, looking to create social and technological innovations and businesses)
  - It is comparatively easier for Canadian Institutes of Health Research (CIHR) grant holders to achieve postdoctoral scholar matching funding than Social Sciences and Humanities Research Council of Canada (SSHRC) and Natural Sciences and Engineering Research Council of Canada (NSERC) grant holders, and so equity should be examined
  - The research environment still largely uses a Principal Investigator model and measures

success more by money received than impact made. The proponent noted that the University's new Academic Staff Criteria and Processes Handbook embeds the principles of the Declaration on Research Assessment (DORA) and the University is moving toward using demonstration of impact as a factor in assessing academic staff.

- In response to questions, it was reported that:
  - One of the other *Ahead of Tomorrow* implementation plans, the Operations Plan, will speak to staffing at the University but the Research and Innovation Plan can speak to the barriers to achieving the University's research goals
  - There is a University website with all four of the draft *Ahead of Tomorrow* implementation plans and connection to the online feedback form, and a link to this website can be sent to the members
  - The *Ahead of Tomorrow* goal to increase financial support for thesis-based graduate students is addressed in another implementation plan, the Academic Innovation Plan
  - There is awareness that there is high demand for improved services and the need for capacity is being taken into account
  - The VPR office is investing in offices of support for each of the five Institutes of Transdisciplinary Studies areas of focus (Energy Transformation, Health and Life, Cities and Communities, Digital Worlds, and Democracy and Social Change)
  - The University has a strong commitment to equity, diversity, and inclusion (EDI) and is a signatory to the Dimensions EDI Canada charter, and EDI will continue to be a priority
- The Co-Chair reported that the Research and Innovation Plan will return to the Committee for recommendation in the new year, and encouraged members to continue to provide feedback on the draft

## 5. Quantum Update

Documentation was circulated with the Agenda. Robert Thompson and Megan Lee, Director, Quantum City, presented this item.

### Highlights:

- The presenters provided an update on the University's quantum ecosystem, including:
  - The University has a long track record of quantum research and innovation excellence, now built around the University's Institute for Quantum Science and Technology, the province's Quantum Alberta partnership, the province's multi-institutional Quantum Major Innovation Fund project, and the University's recently-announced Quantum City research centre and tech economic sector
  - Quantum City has three pillars of activities to support quantum adoption: 1) to create pipelines for quantum and quantum-adjacent expertise, 2) to build and operate quantum enabling infrastructure, and 3) to bridge the gap between quantum technologies and solutions. Quantum City will include hiring into seven new tenure-track positions in the Faculty of Science and the Schulich School of Engineering, and possibly further hiring in business/economics. The Quantum City Challenge launched last week, and it is expected this engagement initiative will attract partnerships and the location of startups in Calgary.
  - Three Canada Research Chairs have been allocated in the quantum area, specifically in Quantum Hardware, Quantum Machine Learning, and Quantum Computing in Chemical

Systems, and there is a CERC in Quantum Photonics

- The qConnect summit was held November 16-17, 2023 in Calgary, with over 300 quantum creators and users attending including several government, funding, and industry leaders
- Quantum infrastructure is being developed at the University, including the Innovation Hub of Quantum collision space in the Alastair Ross Technology Centre north of the main campus and the nano facility and Academic Hub of Quantum in the Earth Sciences Building on the main campus. Construction of the qLab Nanofabrication Centre will commence in 2024.
- Quantum Horizons Alberta is a philanthropically funded pan-Alberta institute that will investigate the foundations of quantum mechanics, and will include hiring into four positions in Calgary, four positions in Edmonton, and one or two positions in Lethbridge
- Quantum will not replace the oil and gas sector, but quantum science and technology is a key contributor to societal development and connects to municipal, provincial and federal sectors including agriculture, Indigenous relations, finance, fisheries, health, infrastructure, innovation, environment and climate change, and transportation. Use cases are being developed and users and experts are being connected.
- There is lots of funding for quantum and that a challenge is in recruiting
- Discussion included that:
  - Quantum presents significant possibilities
  - The University has established strengths in this area and is positioned to continue this growth and leadership
  - It is necessary for Alberta to diversify its economy in order to retain the younger population

## **6. Canada Excellence Research Chairs (CERC) Update**

Robert Thompson presented this item.

Highlights:

- The presenter described the 2022 CERC program application timeline and processes. The presenter then reported that the results were announced on November 16, 2023, and the University has been awarded two awards: one in Indigenous Ways of Climate and Water Sustainability for Planetary Health and Well-being (Deborah McGregor, to be cross-appointed to the Faculty of Science and Faculty of Arts) and one in Photonic Quantum Science and Technologies (Urbasi Sinha, to be appointed to the Faculty of Science).
- Discussion included that the CERC program is a positive thing for the researcher, their country of origin, and Canada and institution of destination, and is not associated with brain drain

## **7. Other Business**

There was no other business.

**8. Adjournment**

**Moved/Seconded**

That the Research and Scholarship Committee adjourn the November 23, 2023 meeting.

**Carried**

The meeting was adjourned at 3:50 p.m.

---

Elizabeth Sjogren  
Meeting Secretary