

University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Minutes of the 4 October 2021 Meeting
[in agenda order]
Microsoft Teams Meeting Videoconference

Present: Jeff Casello, Amelia Clarke, Charmaine Dean, Anna Esselment, Ana Ferrer, Nathan Funk, Bertrand Guenin, Aiden Huffman, Julie Joza, Zabeen Khamisa, Brian Laird, Anita Layton, Bessma Momani, Bruce Muirhead, Liz Nilsen, Jennifer Reid, Martin Ross, Sophia Sanniti, Marianne Simm, Simron Singh, Richard Staines, Mike Szarka, John Thompson, Shawn Wettig, Kathy Winter (secretary)

Resources: Angela Christelis, Trevor Clews, Carrie MacKinnon, Amanda McKenzie

Guests: Kevin Hare, Vanessa Schweizer

Regrets: David Clausi, Alison Hitchens*, Kareem Tarek Mostafa, Jerika Sanderson*, Siva Sivoththaman*

Organization of Meeting: Charmaine Dean, co-chair of the council, took the chair, and Kathy Winter acted as secretary. The secretary advised that due notice of the meeting had been given, a quorum was present, and the meeting was properly constituted.

1. DECLARATIONS OF CONFLICT OF INTEREST

No conflicts of interest were declared.

2. MINUTES OF 13 SEPTEMBER 2021 AND BUSINESS ARISING

By consensus, the minutes were approved as distributed.

3. CO-CHAIRS' REMARKS

Casello provided updates: (a) [AMTD](#) – 2022 application process has [launched](#); council members asked to circulate this information widely to encourage applicants from all 6 faculties; (b) Policy 30, Employment of Graduate Student Teaching Assistants – final draft approved by Graduate Student Relations Committee and now being sent to Provost, as well as for formal consultation (e.g., Grad Ops, Deans Council, LIS, HR, Undergrad Ops)-Casello thanked drafting committee, including Khamisa and Reid; (c) [President's Forum](#) Developing Talent for a Complex Future – to be held 6 October 2021; Casello, a panelist, to speak on the value of graduate students and the University's commitments to integrated and experiential learning, interdisciplinarity, pathways for life-long learning.

Dean spoke to: (a) [Canada Foundation for Innovation](#) (CFI) and their re-shaping interest in proposals featuring major and core facilities (vs that of individual researchers) – Dean and Burns similarly launching review of core facilities (not just CFI and Science, but also animal care and aquatic facilities) in fall 2021, including investigation of purpose, aims, scope, operations, terms of reference, and delivering on the University strategic plan – internal core facility proposals to start with expansion to external combined core facilities or shared approaches across institutions; (b) workshops – [Safeguarding Science workshop](#) and forthcoming Research Security Assessments workshop as spearheaded by Momani and Muirhead along with contributions from University of Toronto and Ottawa - varied topics, such as risk assessment, geopolitics, threats to Canada, anti-racism and racial profiling.

4. RESEARCH CENTRES AND INSTITUTIONS

4c. Dissolution of Waterloo Research Institute in Insurance, Securities and Quantitative Finance (WatRISQ). Council heard a motion to recommend to Senate the dissolution of Waterloo Research Institute in Insurance, Securities and Quantitative Finance (WatRISQ), as presented. Ferrer and Huffman. Carried.

4d. Renewal of Waterloo Institute for Complexity and Innovation (WICI). On behalf of Senate, council approved the renewal, for a 5-year term, of the Waterloo Institute for Complexity and Innovation (WICI), as

presented. Vanessa Schweizer (director) provided an overview (at Attachment 1) of the Institute-featuring its focus on interdisciplinary research and application of knowledge and tools for addressing complex, seemingly intractable problems with a holistic, systemic view. Schweizer responded to a question by saying WICI is highly collaborative and is open to building connections with entities such as Council for Research and Innovation and Critical Media Lab. Clarke and Singh. Carried.

5. OFFICE OF RESEARCH ETHICS

Council heard a motion to approve 1 new member to the Clinical Research Ethics Board, as presented. Joza and Muirhead. Carried.

6. GRADUATE STUDIES ACADEMIC CALENDAR UPDATES

On behalf of Senate, council approved minor updates to [General Information](#) within the Graduate Studies Academic Calendar, effective Winter 2022, as presented. These included: *Committees and councils – description updates; Academic regalia and University colours, arms, motto, mace - removing content*. Simm and Huffman. Carried with one opposition. The motion to approve updates to *Responsibilities of graduate studies administrators* was withdrawn due to concerns regarding the significantly paired down description of the graduate student supervisor-especially in relation to their responsibilities. GSPA and GSA council members will meet to address. Simm and Huffman. Motion to withdraw carried.

7. GRADUATE AWARDS

On behalf of Senate, council approved item a, as presented. In response to a question, Casello outlined the University's commitment to ensuring that the right lens (via inclusivity committees, for example) is brought to all decisions. Simm and Huffman. Carried. Item b was received for information.

8. OTHER BUSINESS

There was no other business.

9. NEXT MEETING

The next meeting will be held Monday 8 November 2021 from 10:30 a.m. to 12 noon; Microsoft Teams.

8 October 2021

Kathy Winter, PhD, CPsych,
Assistant University Secretary



WATERLOO INSTITUTE
for **COMPLEXITY & INNOVATION**

An Institute for Complex Systems Research in Canada

Supporting transdisciplinary collaborations in **research and education**
on **complex systems** to address society's most pressing challenges
for global impact.

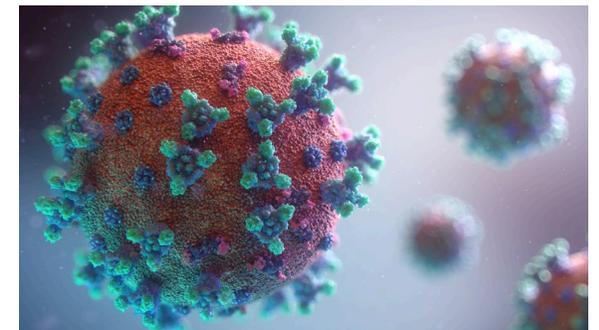
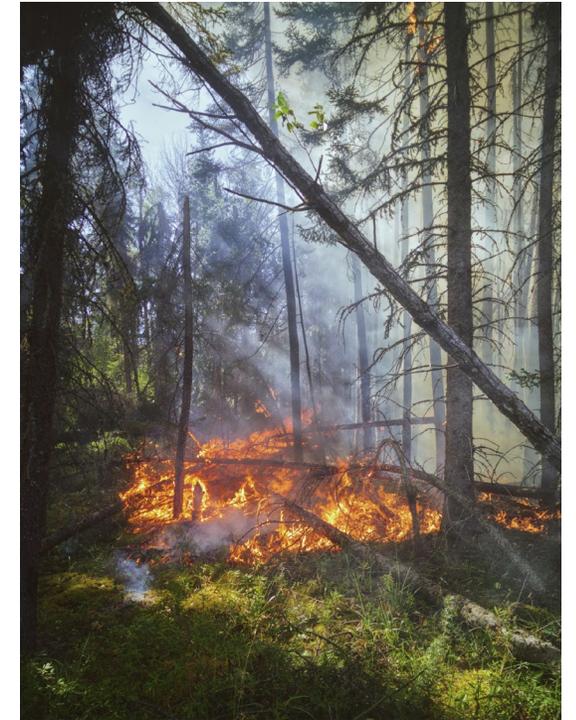


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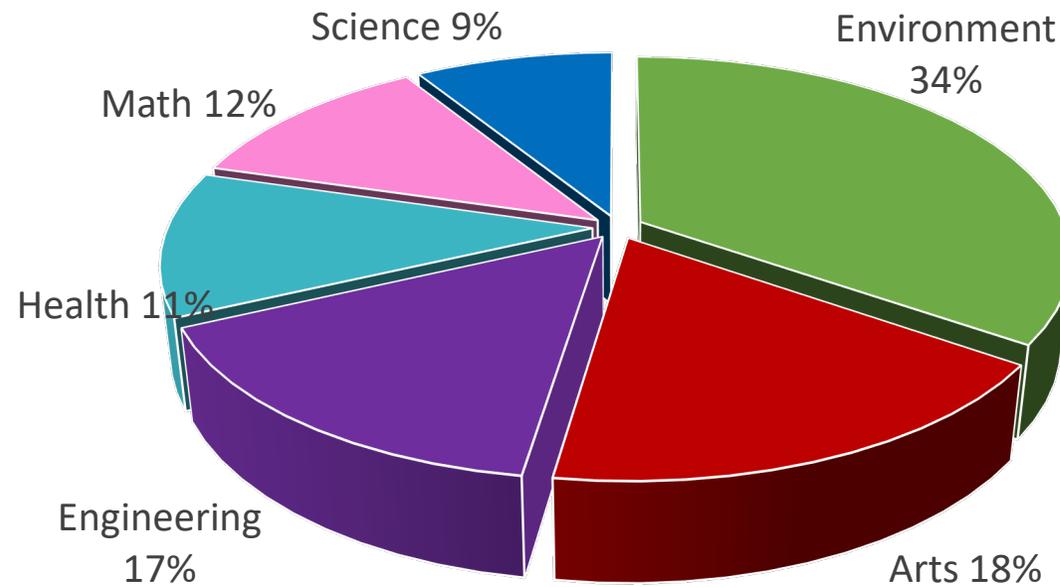
Why Study Complex Systems? To Tackle Grand Challenges

WICI fosters interdisciplinary research & application of knowledge and tools for addressing complex, seemingly intractable problems with a holistic, systemic view.

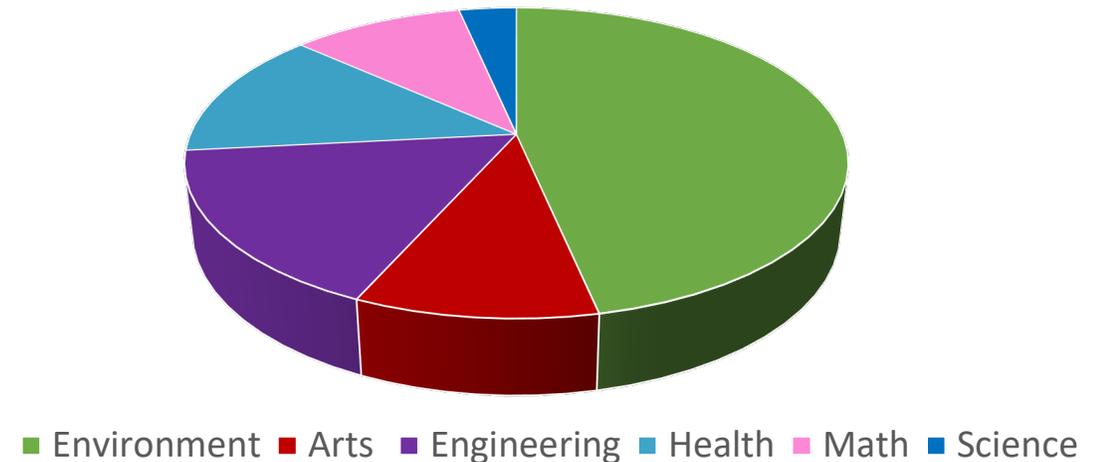


Who Are WICI Members?

- WICI currently has **147** members representing all six Faculties.
- Student members (**30**) represent **20%** of overall membership.

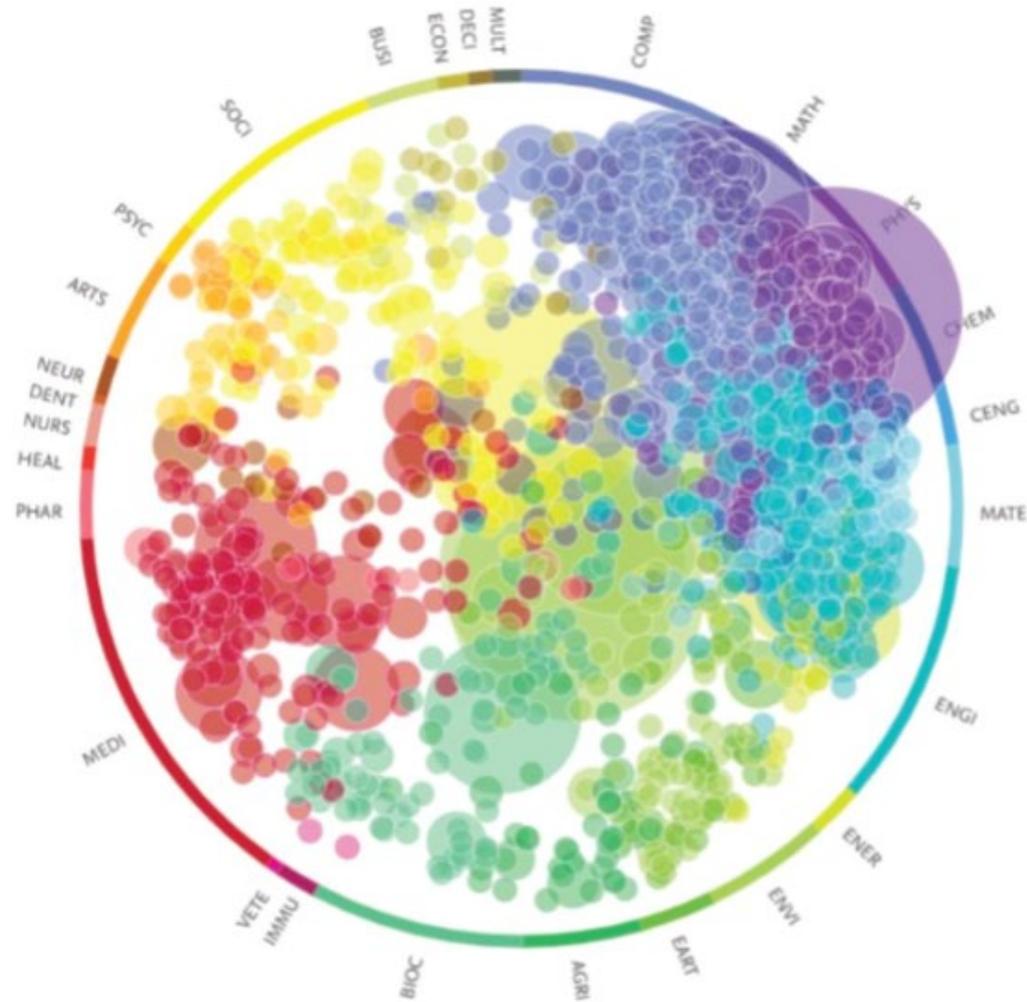


WICI Membership by University of Waterloo Faculty



WICI Student Membership by Faculty

Mapping Complex Systems Research at UW, across Canada



- Since 2016, WICI core members reported funding for complex-systems research exceeding **\$13.2 million** and **295** publications
- However, self-reported WICI metrics captured only 6% of complexity publications at UW, under-representing the true impact of complex systems research and the need for a Canadian complex systems hub



Canadian Network for Complex Systems (CNCS)



British Columbia

Cascade Institute – Royal Roads University
University of Victoria
UBC– Vancouver
UBC– Okanagan (Kelowna)
Simon Fraser University - Kelowna



Ontario

University of Waterloo
University of Guelph
Western University



Montreal

McGill University
University of Montreal



Newfoundland

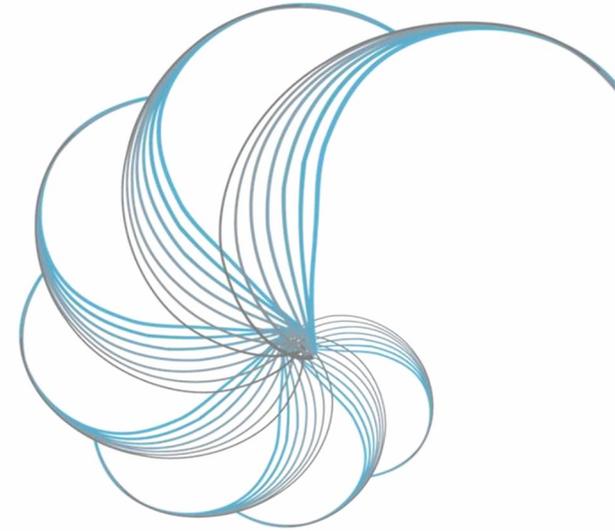
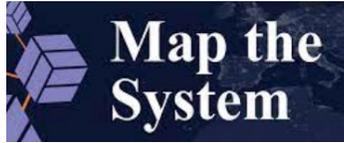
Memorial University, St. John's



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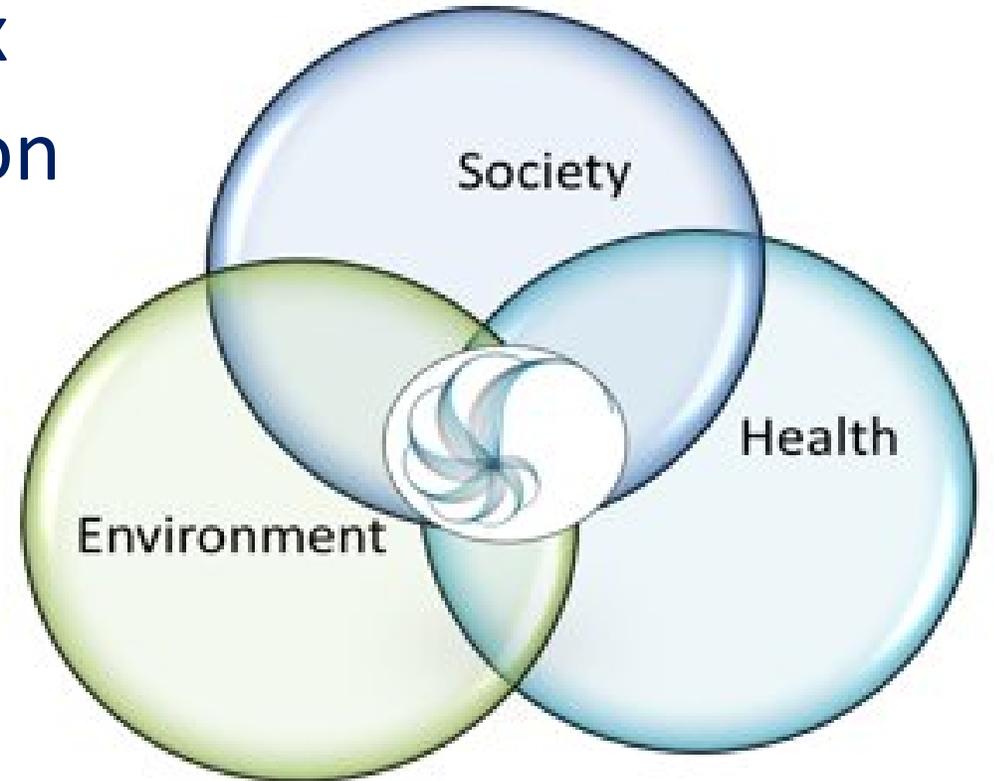
Synergies across disciplines, partners

- WICI events, initiatives, partnerships enable researchers to **connect & collaborate** through an interdisciplinary ecosystem at UW to address **complex problems**.
- Shared interests/missions:
 - systems thinking
 - problem solving
 - social innovation



WICI Mission and Goals through 2025

- Facilitate interdisciplinary complex systems research at the intersection of society, environment, health
- Prioritize education initiatives in complex systems
- Establish a long-term resource base



Prioritizing Complex Systems Education

- **30%** of respondents to our 2019 Member Survey would like WICI to strengthen activities in training/education.
- A training program proposal (Dordi, 2020) was developed as part of our five-year planning process. Dordi identified:
 - **166** courses in complexity / systems thinking at UW
 - Professional education as a potential delivery mode
- In 2019, professionals contacted us, requesting applied complexity training and access to trainees (e.g. co-op students)
- We are responding to this demand through partnerships with the Cascade Institute (at RRU), WatSPEED, WISIR, and Problem Lab

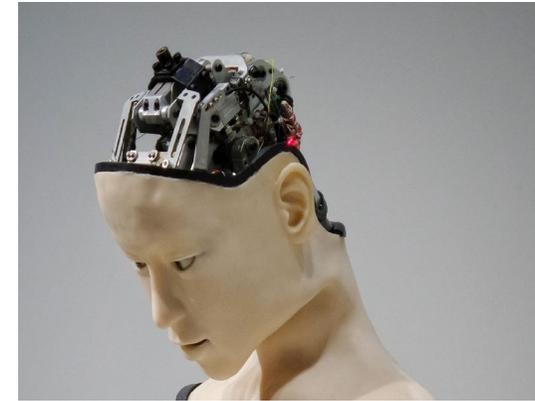


Establishing a Long-Term Resource Base

WICI is exploring opportunities for alternative funding streams (business model canvas in Comeau 2021):

- Professional development training/workshop revenue
- Foundation funding options with offices of Advancement
- Resource-sharing
 - Consolidation with the **Waterloo Institute for Social Innovation and Resilience (WISIR)** as a sub-centre of WICI
 - Collaborations with other inter-institutional entities
- Pathways for revenue directly from grants/research support funds

Why Renew WICI?



- \$80K/year from Faculties, Office of Research, other sources through 2025.
- **18 Letters of Support** – from **all six Faculties**, external and internal members – illustrate enthusiasm for WICI and a Canadian complex systems hub. The hub belongs with WICI, here at University of Waterloo.

