GRADShowcase 2021 - Research Themes for the Poster Competition

Health and Wellbeing

- Exploring the social determinants of health and proactive approaches to the prevention of disease and injury.
- Pioneering new methods and technologies for the detection and diagnosis of diseases as well as treatment monitoring.
- Developing new therapies and treatments for diseases and disorders as diverse as cancer, arthritis, and post-traumatic stress disorder (PTSD).
- Promoting accessible, patient-centered systems and services to meet the needs of diverse groups.

Energy and Sustainability

- Creating innovative infrastructure that is defining how cities of the future will be built and managed.
- Improving policy and regulation to support governance in such areas as water resources and energy costs.
- Accelerating the adoption of sustainable technologies in Canada and driving their development and commercialization.
- Investigating new sustainable practices in areas such as energy consumption, carbon emissions, and repurposed building materials. Working in areas such as green building and intelligent transportation systems to develop innovative infrastructure that is defining how cities of the future will be built and managed.

Industrial Management and Innovation

- Exploring new design methods and applications in areas such as 3D printing, satellite control, and biomedical devices.
- Creating systems and technologies that take human factors into account to provide organizations with a competitive edge without causing undue stress or risk of injury.
- Progress in areas of advanced manufacturing such as control systems, process innovation, new
 materials, and supply chain management. Development of novel technology (such as devices or
 processes) in consumer products, commercial, or industrial sectors to improve production.

City-building and Social Justice

- Addressing the needs of diverse communities and individuals in Canada and abroad through innovative services in areas such as immigration and mental health.
- Helping governments to create fair and effective social policy addressing tough social problems like child abuse and lack of political engagement.
- Advancing innovative systems and planning to define how cities and societies of the future will be built and managed.
- Promoting diversity and inclusion through effective services for minority groups, representation in art and culture, inclusive workplace practices, and indigenous governance systems.
- Engaging with local and international partners in community building activities to support social justice and equality.

Digital Media and Communication

- Bridging disciplines and approaches to explore the applications of big data and information in areas such as financial services and social media.
- Harnessing the potential of emerging computing and communication technologies in areas such as tangible interfaces and cloud and context-aware computing to solve real-world problems.
- Developing new applications and assistive tools that are promoting accessibility and supporting people with disabilities.
- Crossing disciplines to explore new methods and applications in 3D printing and advanced manufacturing in areas such as rapid prototyping and control systems.
- Combining established best practices with cutting-edge content creation platforms to advance storytelling innovation and diverse perspectives.

Academic Innovation

- Advances in first principles in research, including processes in data gathering, management, and analysis.
- Solving mathematical fundamentals.
- Meta-analysis of applied research.