



Research, **Innovation**
Scholarship and
Entrepreneurship (RISE)

EVENT PROCEEDINGS



Research, Innovation Scholarship and Entrepreneurship (RISE)

Welcome to RISE!

Welcome to **RISE Symposium**, a celebration of the research, innovation, scholarship and entrepreneurship taking place at Georgian College. Join us to see how students are changing the world, explore the 3D Click & Shop Marketplace, view the Innov8 Award presentations submitted by students and/or student teams and be part of creativity and collaboration without borders. The schedule of events includes engaging guest speakers, live sessions that will make you think critically and research showcases that demonstrate the innovation happening across the college.

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/Georgian College Research & Innovation



/Bernick Online



Day 1: April 19

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9 A.M.	Land acknowledgement and opening remarks	Gregory GavilanesHeredia , Student Researcher Dr. MaryLynn West-Moynes , President and CEO Dr. Mira Ray , Director, Research and Innovation <i>at Georgian College</i>	Join us for a land acknowledgment to honour Indigenous history and culture. Let's celebrate the start of RISE Symposium with opening remarks from Dr. MaryLynn West-Moynes. Discover the research and innovation you can experience at RISE.
9:15 A.M.	RISE, create, innovate and be Mindful@Work	Becky Dewar , Field Placement Officer, Liberal Arts Jenn Hickey , Administrator Learning & Development, Human Resources <i>at Georgian College</i>	Learn about the Mindful@Work 8-session series offered at Georgian and experience guided interactions with other participants. Join in to gain a basic understanding of the learning theories that make up the program, practice Time to Breathe, and leave with a practice and integration strategy that can be applied to any work or life context.
	Central Painting	Sean Hamill , Operations Manager, <i>Central Painting and Georgian College Research Team</i>	Learn more about our applied research project with Central Painting and meet the project team behind the design and development of an innovative, all-in-one prototype tool for construction service providers.
10 A.M.	Changemaking through interior decorating	Mary Dobson , Faculty, Interior Decorating Program Paula Baille , Coordinator and Faculty, Interior Decorating Program Katie Van Heerde , Interior Decorating Student Session moderated by Virginia Barlow , Digital Transformation Specialist, Research, Innovation and Entrepreneurship <i>at Georgian College</i>	Join faculty and students from the Interior Decorating program at Georgian College as they share their design concepts for a retail furniture showroom at Redwood Park Communities, Barrie Furniture Bank. Listen as they reflect on their experiences of enriching the community through design, and explore how important furnishings can be to one's sense of home and hope.
	Zip Trailers Inc.	Ron Clark , President, <i>Zip Trailers Inc. and Georgian College Research Team</i>	Time for a spotlight on one of our industry partners! Learn how our students are helping the Zipline Trailers Inc. team develop and manufacture a new generation of ultralight and aerodynamic travel trailers.
	Smart, Proactive, Enabled, Energy Distribution – Intel- ligently, Efficiently and Responsive: Measuring the GHG impacts of a Smart Grid - Project SPEEDIER	Scott McCrindle , Program Coordinator, Interactive Media Design/Web, Faculty Researcher, Research and Innovation and <i>Georgian College Research Team</i>	Take a sneak peek at the SPEEDIER project, partially funded by Natural Resources Canada's Smart Grid Program. The Research and Innovation department in partnership with Lakeland Holdings Inc., comprised of Lakeland Power, Bracebridge Generation and Lakeland Energy, have focused on implementing innovative approaches and creating a baseline against which to measure greenhouse gas reductions in Parry Sound.



Day 1: April 19 (continued)

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11 A.M.	Measuring the greenhouse gas impacts of smart grid technology	Scott McCrindle , Program Coordinator, Interactive Media Design/Web, Faculty Researcher, Research and Innovation, <i>Georgian College</i>	Join Scott to learn about how an electrical utility team estimated and measured the emissions saved through the installation of industrial batteries, solar PV modules, demand-response equipped hot water heaters, and EV charging equipment.
	TC Energy	Andrew Mitchell , Director of External Relations Clark Little , Senior Community Representative <i>at TC Energy and Georgian College Research Team</i>	Get a glimpse of our applied research project with TC Energy to design and develop a web-based, local suppliers search system prototype.
	Environmental Systems Components Corporation	Vern Solomon , Founder, <i>Environmental Systems Components Corporation and Georgian College Research Team</i>	Let's shine the spotlight on Environmental Systems Components Corporation and the SmartCRITICAL™ project. Learn about the increased importance of connected critical environments for manufacturing in the COVID-19 era.
12 P.M.	Keynote address: Innovation in architectural research and practice	Dr. Eiman Elwidaa , Faculty, Engineering and Environmental Studies, <i>Georgian College</i>	Join Dr. Eiman Elwidaa as she transcends her lived experience, architectural education, practice and research journeys and their influence on nurturing her reflectivity and innovative perception to the role of architecture and environmental design in promoting social justice and human wellbeing.
1 P.M.	Closing remarks	Dr. Mira Ray , Director, Research and Innovation, <i>at Georgian College</i>	Dr. Mira Ray recaps RISE Symposium day one, explains how to join in on the scavenger hunt and networking event in the metaverse and shares a preview of what to expect tomorrow.
1 P.M.	Scavenger hunt and networking event in the metaverse	Jessica Thomas , iLRN Coordinator, Research Innovation and Entrepreneurship Tirth Patel , iLRN Social Media Specialist, Research, Innovation and Entrepreneurship, <i>at Georgian College</i>	Experience Georgian's virtual campus in the Immersive Learning Research Network (iLRN) platform. Create your own avatar and compete in a scavenger hunt that will have you taking a speedboat ride, showing off your cool dance moves and climbing to the top of a lighthouse. There will also be time to chill out on the beach and get to know other RISE Symposium attendees. Separate program download required . There will be a live Zoom help session that can be accessed from the event platform.



Day 2: April 20

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Entrepreneurship Centre

9 A.M.	Land acknowledgement and opening remarks	Brunilda Xhaferllari, Junior Project Manager, Research Student, Research and Innovation, Kevin Weaver, Vice President Academics, Dr. Mira Ray, Director, Research and Innovation at Georgian College	Join us for a land acknowledgment to honour Indigenous history and culture. Let's celebrate day two of RISE Symposium with opening remarks from Kevin Weaver. Discover the research and innovation you can experience at RISE.
9:15 A.M.	Innovative teaching and guidance, based on the 7 grandfather teachings	Andrew Cywink, Faculty and Technologist, Research and Innovation, Georgian College	It is possible to create a more holistic learning environment, with a focus on Indigenous learners, by subtly incorporating tradition into course curricula. Using teachings, like the 7 Grandfather Teachings, enables us to create more complete learning materials when developing a course. Join Andrew as he discusses his work in a pre-apprenticeship electrical program offered at Georgian College that included Indigenous students from Beausoleil (Chimnissing), Rama and Georgina Island First Nations. Hear how Andrew applied the 7 Grandfather Teachings to the electrical trade and explore the importance of connection between the traditional and the modern world.
	Crucial Logics	Nim Nadarajah, Partner, Crucial Logics and Georgian College Research Team	Let's shine the spotlight on Crucial Logics and our project to develop a proof of concept application.
10 A.M.	Future proofing students panel discussion	Dr. Jamie Doran, Executive Director, Research, Innovation and Entrepreneurship Rob Theriault, Immersive Technology Manager Dr. Isabelle Deschamps, Faculty Research Lead, Research and Innovation, Faculty, Human Services and Community Safety Angeline King, Native Language Faculty, Indigenous Studies, at Georgian College	Graduates are entering a work world unlike anything that's existed before. In just two short years video conferencing, remote collaboration, and even virtual reality have become tools of the modern workplace. Students need to be prepared to work and thrive in this rapidly changing technology landscape. Join Jamie Doran as he hosts Rob Theriault, Angeline King and Isabelle Deschamps, all experts in extended reality technologies (XR) and the use of XR in academic settings that aim to future-proof our students.
11 A.M.	Meet the Henry Bernick Centre Entrepreneurs	HBEC, VR Hackathon, XcelerateHER, Georgian Chocolate, Gorgeous Spice Co., Kendra Rose Jewellery, Two Sisters Naturals, Honey Bee the Change, Ohh Beehive Beeswax Wraps	Join the Henry Bernick Entrepreneurship Centre (HBEC) in the 3D Click and Shop Marketplace for a curated retail experience and live chat with our featured clients.



Day 2: April 20 (continued)

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BROADCASTING
Barrie 360 ROCK 95 107.5K00FM

	Molded Precision Components	David Yeaman, President/Owner, Molded Precision Components <i>and Georgian College Research Team</i>	Check out our applied research project with Molded Precision Components, meet the project team and learn about the design and manufacturing of MPC's automated packaging cell.
11:45 A.M.	Equity, Diversity, Inclusion & Belonging (EDI&B) Student Panel	Ishaan Sachdeva, President, Barrie Georgian College Students' Association Sarah Ortiz, VP Equity and Inclusion, Orillia Georgian College Students' Association, Brooke Corner, VP Community Engagement, Orillia Georgian College Students' Association Aisha O'Connor, Peer Development Coordinator, Student Leadership and Transition Services Sheona Morrison, Manager, Student Experience Student Leadership and Transition Services	Hear from three, current Georgian Grizzlies about how they embrace the best practices for equity, diversity, inclusion and belonging in their day-to-day lives. Learn about how they are proactively working to create a student-led equity, diversity, inclusion and belonging organization to ensure students have a safe space to share their experiences and gain knowledge.
	Sweet Charity Medical Assistance Dogs	Jean Hargreaves, Volunteer, Sweet Charity Medical Assistance Dogs <i>and Georgian College Research Team</i>	Check out our applied research project with Sweet Charity's Canine Ambassador Program, offered in partnership with the Simcoe County District School Board. Learn about how they staff dog teams for settings such as hospitals, seniors' residences, nursing homes, schools, libraries, colleges and universities and the positive impact on wellbeing.
12:45 P.M.	Growing a region of changemakers: building educator capacity to measure and support students' growth as social innovators using participatory action research	Dr. Sarah Hunter, Head of Program Research and Innovation Tracy Mitchell-Ashley, Faculty Developer, Centre for Teaching and Learning Dayle Boyle, Research Assistant, Research and Innovation Christopher Michael, Student Researcher, Research and Innovation Jon Carson, Student Researcher, Research and Innovation Nesime Guzel Ertop, Student Researcher, Research and Innovation Muskaan Karwal, Research Assistant, Research and Innovation <i>at Georgian College</i> Charmaine Lyn, Director of Changemaker Education, Ashoka Canada	Georgian College in partnership with the Simcoe County District School Board (SCDSB) and Ashoka Canada is poised to help create a generation of young changemakers. In collaboration with employers, educators and students, a Research Advisory Council will develop evaluation tools that measure growth in the four Ashoka changemaker competencies that will help with social transformation world-wide: empathy, shared leadership, teamwork, and changemaking. During this session, the research team will share how they are equipping educators with the tools to measure and validate these key skills and mindsets associated with successful social innovation in the 21st century and ultimately focus their efforts on where future growth can happen.
	Tempo Flexible Packaging	Leonardo Giglio, CEO, Tempo Flexible Packaging <i>and Georgian College Research Team</i>	Time for a sneak peek at our applied research project with Tempo Flexible Packaging. Meet the project team and learn about their work to design and develop a Robotic Package Sorting System prototype.



Day 2: April 20 (continued)

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GEORGIAN COLLEGE STUDENTS' ASSOCIATION

1:30 P.M.	Early career guide for emerging talent	Dustin Jez, Co-Founder and President, <i>Fairchance Learning</i>	Dustin shares a roadmap for students, administrators, educators and job seekers that includes the entry-level skills they need to begin their journey toward a career in gaming and interactive 3D. Find out about the content and recommendations available through Epic's learning portal.
	Empower Simcoe	Claudine Cousins, Chief Executive Officer, <i>Empower Simcoe</i>	Take a peek at our applied research project with Empower Simcoe, and meet the project team behind the development of a digital training program and accompanying toolkit for Infection Prevention and Control Canada (IPAC).
2:30 P.M.	Keynote address: Living your Juicy, Delicious Life . . . Before it's too late	Monique Bryan, CEO and founder, <i>Monique Bryan Worldwide Inc.</i>	We are living in a time of instant gratification and "following your bliss," yet mental illness and depression are at an all-time high. Join Monique as she explores the culture of toxic positivity. Learn how, you can use painful experiences as fuel to go after everything you want and live a juicy, delicious life!
	Beaver Rock Roastery Inc.	Dan Saso, President, <i>Beaver Rock Roastery Inc. and Georgian College Research Team</i>	Take a sneak peek at our applied research project with Beaver Rock Roastery Inc. Meet the project team and learn more about the design, manufacturing and integration of a fully automated smart solution for the coffee packaging industry (K-cups).
3 P.M.	More than closing remarks: Innov8 Awards LIVE announcement	Dr. Mira Ray, Director, Research and Innovation, <i>Georgian College</i>	Let's review highlights from RISE Symposium and share our gratitude. Join us to find out the winners of this year's Innov8 Awards' student and alumni competition. We'll also be making a HUGE announcement (you don't want to miss it!). Find out who's at the top of the gamification leader board and the winner of our "Code Hunt Challenge" grand prize. Learn how you can join us this June for RISE Summit: Big Ideas' Talks.



Showcase Channel | View Anytime

What is the Showcase Channel?

Visit the showcase channel to view projects and research submitted by students, staff, faculty, and industry partners. When you log into the virtual platform you'll start in the "LOBBY." Select "Showcase Channel" from the navigation menu on the lefthand side of your screen. You'll see a list of projects. Click on each one to get a taste of the change making ideas and innovation happening at Georgian College.

Research and Innovation Showcase	
TITLE	PRESENTED BY
Ashoka Canada	Charmaine Lyn, Director of Changemaker Education, Ashoka Canada Tracy Mitchell-Ashley, Faculty Researcher Sarah Hunter, Faculty Researcher Muskaan Karwal, Research Assistant Dale Boyle, Research Assistant
Beaver Rock Roastery Inc.	Dan Saso, President, Beaver Rock Roastery Inc. Amir Baghaki, Faculty Researcher Gregory GavilanesHeredia, Student Researcher Mckenzie Thayer, Student Researcher
Central Painting	Sean Hamill, Operations Manager, Central Painting
Crucial Logics	Nim Nadarajah, Partner, Crucial Logics Eli Kane, Faculty Researcher Sanjeev Kumar, Research Assistant Yachao Xiong, Research Associate
Empower Simcoe	Claudine Cousins, Chief Executive Officer, Empower Simcoe Erin Gilchrest, Faculty Researcher Howard Bloom, Faculty Researcher Muskaan Karwal, Research Assistant



Showcase Channel | View Anytime

Research and Innovation Showcase (continued)	
TITLE	PRESENTED BY
Environmental Systems Components Corporation (ESC)	Vern Solomon, Founder, Environmental Systems Components Eli Kane, Faculty Researcher Sanjeev Kumar, Research Assistant Yachao Xiong, Research Associate
Lakeland SPEEDIER	Scott McCrindle, Faculty Researcher
Molded Precision Components (MPC)	David Yeaman, President/Owner, Molded Precision Components Gregory Gavilanes Heredia, Student Researcher Mckenzie Thayer, Student Researcher
Sweet Charity Medical Assistance Dogs	Jean Hargreaves, Volunteer, Sweet Charity Medical Assistance Dogs Howard Bloom, Faculty Researcher Adam Stibbards, Faculty Researcher
TC Energy	Andrew Mitchell, Director of External Relations, TC Energy Clark Little, Senior Community Representative, TC Energy Rich Freeman, Faculty Researcher
Tempo Flexible Packaging	Leonardo Giglio, CEO, Tempo Flexible Packaging Hadi Hosseini, Researcher
Zip Trailers Inc.	Ron Clark, Director, Zip Trailers Inc. Gregory Gavilanes Heredia, Student Researcher Mckenzie Thayer, Student Researcher



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Research and Scholarship Showcase	
TITLE	PRESENTED BY
A forest field manipulation using bismuth shot shell as a non-toxic alternative to lead	Jim Karagatzides, Faculty, Engineering and Environmental Technologies
Advanced digital modulation technique for future wireless transceivers in IIOT applications based on compressed sensing	Dr. Mohammadreza Balouchestani, Faculty, Engineering and Environmental Technologies
Georgian College's Changemaker Micro Certificate	Mike Zecchino, Manager, Student Housing and Community Engagement Laura Koza, Conviviality Learning Coordinator
Co-creating inclusive interviews: VR technologies for job interview training of individuals on the autism spectrum and strategies for employers	Mirjana Jevremovic, Faculty, Design and Visual Arts
Conducting community-based research: showcasing our changemaking research process for the "Growing a Region of Changemakers" CCSIF project	Dr. Sarah Hunter, Head of Program Research and Innovation Tracy Mitchell-Ashley, Faculty Developer, Centre for Teaching and Learning Dayle Boyle, Research Assistant, Research and Innovation Christopher Michael, Student Researcher, Research and Innovation Jon Carson, Student Researcher, Research and Innovation Nesime Guzel Ertop, Student Researcher, Research and Innovation Muskaan Karwal, Research Assistant, Research and Innovation at Georgian College Charmaine Lyn, Director of Changemaker Education, Ashoka Canada



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Research and Scholarship Showcase (continued)

TITLE	PRESENTED BY
Industrial automation	Hadi Hosseini, Mechatronic Researcher, Research and Innovation
Role of automation in daily life	Mackenzie Thayer, Student Researcher
Language help centre: a restorative approach toward academic honesty	Corinne Whitney, Manager, English for Academic Purposes, Liberal Arts Hanna Shrolyk, Technologist, English for Academic Purposes, Liberal Arts



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Innov8 Awards Showcase

TITLE	PRESENTED BY
Blog content creation using ParseHub	Vishal Kaatal, Amrit Kaur Pannu, Gurpreet Kaur
Collaborations to reduce food loss & waste (FLW) in Ontario	Carla Hanisch
Documenting historical indigenous territories using geographic information systems (GIS)	Kailynn Fife, Ash Leigh Smith, Celine Bonanno, Max Speer-Reems
GIS analysis of pumped hydropower storage facilities and future projects in North America, Europe, China and Australia	Dennis Castro, Jayakrishnan Sureshkumar Manoor, Vrajrajsinh Jadeja
Heart of the community: automated external defibrillator access and awareness program	Jessica Lewis, Ana Lucia CaballeroVictoriSisconetto
High-efficiency infrared cooking	PJ Cheyne-Miller, Brenden O'Donnell, Ian Bouchard, Sebastian Lenart, Temiloluwa Awe



Showcase Channel | View Anytime

Innov8 Awards Showcase (continued)

TITLE	PRESENTED BY
Is the consumption of antibiotics in the community really the greatest cause of bacterial resistance?	Jhoana Patricia Romero Leiton, Kernel Prieto
Parking application	Hsiang-Chun Shepherd, Roopa Rose Shji, Subham Chawla
Recent immigrant entrepreneurship GIS analysis	Satnam Singh Bhatti, Tysen Hansen, Yatharth Panwar
Simcoe County farmers' beliefs and attitudes regarding coyote management	Jyothimol Joy
SON territorial spatial database and GIS analysis	Chloey Savoie, Jordan Cook
Using GIS to map and assess the impact of pollution runoff water in areas surrounding Lake Simcoe	Elizabeth Saman, Fardeen Parmar, Maara Bier, Kiranpreet Kaur



Showcase Channel | View Anytime

Innov8 Awards Showcase (continued)

TITLE	PRESENTED BY
Using GIS to map the hydropumped storage facilities in North America, Europe, China and Australia	Asmita Bagale, Laxmi Giri
Using GIS to map the impact of Mackenzie Investment's Global Green Bond Fund	Joel Douven, Saeedeh Yazdanmehr, Tom Sibö
Vehicle-to-grid: what motivates drivers to plug-in?	Alissa Bennett
WeChat official account: your best way to connect to Chinese customers	Xichen Zhang