Office of Innovation and Community Engagement

2025 REPORT

Office of Innovation and Community Engagement

The Office of Innovation and Community Engagement (OICE) facilitates research relationships between Saint Mary's University and external partners, such as: companies, government departments, and community organizations. OICE is the initial point of contact for faculty members and external partners wishing to collaborate. The office assists with finding suitable expertise, advising on funding, and contract development.

SPRINGBOARD ATLANTIC MEMBERSHIP

Saint Mary's University is a member of Springboard Atlantic, a network of 19 universities and colleges across the Atlantic region. Springboard supports interactions that help advance the commercialization of technology and knowledge transfer. Springboard is partially funded by the Atlantic Canada Opportunities Agency (ACOA).

By strategically positioning resources, Springboard Atlantic helps skilled professionals in academia connect with like-minded contacts in industry, driving research commercialization in Atlantic Canada.

Engineering Solutions

Improving Sustainability in Additive Manufacturing

Dr. Adel Merabet, a Professor in the Division of Engineering at Saint Mary's University, is driving innovation through his partnership with Shifting Shap3s, a clean tech startup company leading the way in additive manufacturing and sustainable plastic waste solutions.

Shifting Shap3s has developed FilamentPro™, a product that decentralizes the recycling of additive manufacturing plastic waste. By allowing users to transform waste into reusable filament, the company tackles two key challenges: reducing environmental impact and improving material efficiency. To enhance FilamentPro's performance, Shifting Shap3s collaborated with Dr. Merabet, leveraging his expertise in heat distribution, automation, and energy efficiency.

Dr. Merabet and his postdoctoral researcher Dr. Mohammadali Kiehbadroudinezhad conducted comprehensive feasibility studies and simulations, addressing critical challenges like filament quality, energy consumption, and productivity. These findings informed significant improvements to FilamentPro and paved the way for the next phase of the project. Dr. Merabet now leads efforts to design and test an optimized version of the product, ready for real-world application and market launch.

"Our experience collaborating with Saint Mary's University has been truly transformative," said Ghazaleh Afrahi, Founder of Shifting Shap3s. "This partnership significantly advanced our product development journey and enhanced the diversity of our talent team. We look forward to continuing this collaboration to strengthen our impact in reducing plastic waste and preserving resources."

Through his work with Shifting Shap3s, Dr. Merabet is not only advancing engineering innovation but also contributing to a more sustainable future in additive manufacturing and material efficiency. This partnership highlights the power of combining expertise, creativity, and shared commitment to addressing global environmental challenges.

Photo (L-R): Ghazaleh Afrahi and Kevin Buchan

"This project reinforced my passion for research with tangible societal impacts, and gave me hands-on experience."
— Liah Christie, undergraduate researcher

A Cleaner Future for Mining:
Advancing Sustainable Gold Extraction

Mining is important to Nova Scotia's economy, but traditional gold extraction methods are based on dissolution and extraction using cyanide slurries of powdered ore, a process known as cyanidation.

With financial assistance from the Mineral Resource Development Fund (MRDF), Dr. Christa Brosseau (Tier II Canada Research Chair in Sustainable Chemistry and Materials) and Dr. Robert Singer, Professors in the Department of Chemistry, are developing sustainable alternatives to using cyanide, and in turn decrease environmental risks. The MRDF supports research that attracts investment, creates jobs especially in rural areas, and promotes innovation in the mining sector.

Their research into task-specific ionic liquids (TSILs) offers a promising solution that will make metal extraction cleaner and more environmentally responsible. TSILs are customizable chemicals capable of efficiently and selectively removing silver and gold from base metals. Ionic liquids can be engineered to be non-toxic and biodegradable unlike cyanide.

For graduate student Tanner George, working on this project provided a new perspective on sustainable mining.

"Having the opportunity to dedicate my time to understanding ore refinement has given me sincere respect for the challenge of effective, yet environmentally conscious and ethically sound mining practices," he said. "While we were not able to completely replace cyanide with ionic liquid thioureas, we recognize the need for chemists to lead the future of critical minerals mining."

By exploring alternatives to traditional gold extraction, this research is contributing to a more sustainable mining industry and helps prepare the next generation of chemists for real-world environmental challenges.

Photo (L-R): Dr. Christa Brosseau, with undergraduate student Liah Christie and PhD candidate Tanner George.

Diversity Empowered by Artificial Technology: EmployNXT's Vision for Inclusive Hiring

A new platform called EmployNXT is designed to revolutionize recruitment for university students by students. Powered by AI and GPT, the platform from WWN Technologies Inc. simpli-fies the job search process, offering tools like automated job match recommendations, resume feedback, and real-time insights to help students maximize their career potential.

This venture was co-founded by Shubhra Singh (CEO) and Purvasha Dewanjee (CMO), both graduates of the Master of Technology Entrepreneurship & Innovation program at Saint Mary's University in 2023. Their journey was guided by Dr. Claudia De Fuentes, Associate Professor of Innovation and Entrepreneurship at the Sobey School of Business, whose mentorship played a key role in shaping their vision.

Supported by funding from the Mitacs Accelerate Entrepreneurship Program, Shubhra and Purvasha focused their research on addressing gaps in female representation and diversity in the workforce. Their findings provided a strong foundation for developing a platform that automates and simplifies the job search and hiring process.

"Saint Mary's University has been instrumental in shaping EmployNXT's journey, providing unwavering support through its dynamic entrepreneurship ecosystem," said Shubhra Singh, Co-Founder of EmployNXT. "Under the guidance of Dr. De Fuentes, we honed our customer discovery process and refined our business strategy, leveraging the incredible resources and opportunities offered by the Sobey School of Business."

With additional funding, EmployNXT also collaborated with experts in engineering and computing science, further refining the platform to deliver results for employers and job seekers.

More than just a job platform, EmployNXT is a community dedicated to supporting students as they transition from education to employment, empowering them to build a successful career from day one.

Photo (L-R): Shubhra Singh and Dr. Claudia De Fuentes

Researching Invasive Jumping Worms in New Brunswick

Invasive species are an increasing threat to ecosystems across Canada. In New Brunswick, the invasive jumping worm has raised concerns among scientists and conservationists. These earthworms change soil conditions and plant growth, which in turn may affect the animals that depend on them.

Dr. Erin Cameron, an Associate Professor of Environmental Science at Saint Mary's University, researches how global changes impact where species live, how they interact with each other, and how ecosystems function. She focuses mainly on invasive earthworms, their impacts on soil and plant life, and overall soil health.

Dr. Cameron's research team includes Dr. Helen Phillips (former postdoctoral fellow at SMU), Samantha Bennett (2023 grad), and several undergraduate field assistants. The team partnered with the New Brunswick Invasive Species Council (NBISC), the New Brunswick Museum, and Laurie Manzer who provided access to their backyard and contributed to the research.

Dr. Cameron's team maps the local distribution of invasive earthworms, gathering data that helps conservation organizations, government agencies, and local communities better understand and address the risks posed by invasive earthworms. Public education and outreach are also key in the effort to prevent the spread of invasive jumping worms.

"Over the past several years, our collaboration with Dr. Cameron and her team, along with staff at the New Brunswick Museum, has been key in enhancing our efforts to raise awareness about the spread of invasive jumping worms in New Brunswick," said Claire Ferguson, Outreach and Communications Coordinator for NBISC. "Supporting Dr. Cameron's research and observing these worms firsthand has provided our staff with invaluable knowledge to share with partners and the public, while also fostering stronger interprovincial collaboration."

By combining scientific research with public engagement, this partnership is playing an important role in protecting New Brunswick's forests and wildlife from invasive species.

Photo: Dr. Erin Cameron. (Photo by Samantha Bennett)

AI-Powered Animation

Enhancing Creativity—One Frame at a Time

Animation is evolving, with artificial intelligence (AI) playing a pivotal role in shaping its future.

Founded in 2021, Moonshot Rights Inc. is a Canada/UK-based animation company on a mission to revolutionize content creation. By harnessing the latest technology and working with top industry talent, they're creating content for kids and family at a higher speed demanded by today's digital platforms.

To achieve this, Moonshot Rights partnered with Dr. Jason Rhinelander, an Associate Professor in the Division of Engineering and Head of Technology and Innovation at the David Sobey Retailing Centre at Saint Mary's University. Dr. Rhinelander specializes in AI, focusing his research on applying machine learning and optimization to embedded, real-time system development in hardware and software.

Together, they are pioneering a new approach to animation, by accelerating the generation of Ultra High Definition (UHD) computer generated frames. Their process takes existing animation assets as training data, and then fills in the gaps between key events, allowing for a more efficient animation workflow.

"In today's technology environment, where breakthroughs are announced weekly, it's incredibly valuable to have a partner like Dr. Rhinelander to help us distinguish between what's hype and what's genuinely transformative," said Juan-Cruz Baldassare, CEO of Moonshot Rights. "Collaborating with Saint Mary's University has been instrumental in advancing our work on algorithmic upscaling, ensuring that we're not just adopting new technologies, but truly understanding and leveraging them to create outstanding content faster."

With AI-driven innovation and Dr. Rhinelander's expertise, Moonshot Rights is improving visual quality, speeding up production, and expanding the possibilities of digital storytelling in animation.

Photo (L-R): Juan Cruz Baldassare, Dr. Jason Rhinelander (front), Michael-Andreas Kuttner

Uniting Heritage and Technology:

Preserving and Promoting Halifax's Old Burying Ground

Though around 12,000 people are believed to be buried in the Old Burying Ground in downtown Halifax, Nova Scotia, only about 1,250 headstones and monuments remain visible today. These markers represent a unique collection of early mortuary art, and are an invaluable source of historical insight into the lives of early Haligonians. Now a National Historic Site and a registered Provincial and Municipal heritage property, the cemetery was active from 1749 to 1844.

The Old Burying Ground Foundation is a non-profit organization dedicated to preserving and protecting the Old Burying Ground in downtown Halifax, Nova Scotia, and promoting the site as a peaceful space for reflection and an invaluable resource for historical and genealogical research.

The Foundation has partnered with Dr. Jonathan Fowler, Professor of Anthropology at Saint Mary's University, on a state-of-the-art mapping project. Using ground-penetrating radar and precision mapping tools, Dr. Fowler and his students have documented each grave monument, linking historical records and photographs with digital maps. They are also investigating whether any tombstones or monuments might be buried beneath the surface after having fallen over.

"The thing we most value in the collaboration is the opportunity for us to reach out into the larger community," said Brian MacDonald, Vice Chair of the Old Burying Ground Foundation. "Dr. Fowler and the students' work helps us to create interest in this part of Halifax's storied history."

Students in Dr. Fowler's Public Archaeology program are gaining hands-on experience while making a meaningful contribution to the community. An accessible online tool is being developed to allow researchers and the public to explore the stories behind the gravestones.

Blending modern technology with the care of heritage properties ensures that this cherished site will continue to educate future generations.

Photo (L-R): Dr. Jonathan Fowler and undergraduate student Zea Jones

Research for Change

Addressing 2SLGBTQ+ Poverty in Canada

Poverty is a significant issue for people who experience social marginalization in Canada. Many two-spirit, lesbian, gay, bisexual, trans, queer, and other (2SLGBTQ+) individuals face workplace discrimination, housing insecurity, and limited access to supportive social programs.

Dr. Maryam Dilmaghani, a Professor of Economics at Saint Mary's University, is co-directing with Project Director Dr. Nick Mulé, Professor of Social Work and Sexuality Studies at York University, a six-year research project aimed at understanding and addressing poverty in 2SLGBTQ+ communities. This national initiative explores sexual orientation, gender identity, religion, race, ethnicity, age, (dis)Ability, etc. and how they intersect with economic inequality.

"2SLGBTQ+ Poverty in Canada: Improving Livelihood and Social Well-being" brings together over 25 academic researchers and 27 community partners, to produce high-impact, policy-driven research that drives meaningful change. The project seeks to quantify the extent of 2SLGBTQ+ poverty, identify its root causes, and develop an evidence-based action plan to serve as a resource for governments, non-profits, and businesses committed to creating lasting solutions.

A key partner in this initiative is the Community-Based Research Centre (CBRC), a national non-profit dedicated to improving the health and well-being of people of diverse sexualities and genders. Together, they aim to close a critical gap in anti-poverty research.

"Addressing the intersection of poverty and marginalization is critical for our communities," said Michael Kwag, Executive Director of CBRC. "This initiative amplifies community voices and shared experiences, helping us better understand systemic disparities, advocate for more equitable policies, and improve health outcomes."

With this research underway, policymakers and organizations will have the data needed to take meaningful action toward reducing 2SLGBTQ+ poverty.

Photo (L-R): Daniel Keays, PhD Candidate, and Dr. Maryam Dilmaghani

Bridging the Gap in Financial Planning:

Empowering Canadians to Take Control of Their Financial Future

To enhance Optiml™, a user-friendly planning tool designed to help Canadians independently manage their financial and retirement plans, Oltre Financial has partnered with Dr. Matthew Boland, a Professor in Accounting at Saint Mary's University.

Dr. Boland and his research team conducted an external review of Optiml, examining its financial models and enhancing its processes. Their collaboration helped strengthen the credibility and accuracy of the platform while introducing advanced financial simulations that allow users to project future returns and stress-test their financial plans.

Partnering with Dr. Boland has been a game changer for Oltre Financial. The company combines goal-based financial planning with powerful tax and estate optimization algorithms to provide Canadians with the tools they need to make informed decisions with confidence.

"Working with Dr. Boland and his team has been such a valuable opportunity for Oltre Financial," said Zac Davies, Co-founder of Oltre Financial and Saint Mary's University alumnus. "Their expertise was crucial in validating our algorithm from a tax perspective, strengthening its credibility, and building customer trust by highlighting our collaboration with a respected research institution. This partnership also resulted in a new feature in Optiml that simulates real-world and historical stock market trends, allowing users to stress test their financial plans with greater precision and confidence."

With Dr. Boland's contributions, Optiml continues to enhance the way Canadians approach financial planning, offering a smarter more strategic path to plan for their future.

Photo (L-R): Zac Davies, Dr. Matthew Boland, Alex Ingham, Max Jessome

We look forward to continuing this collaboration through future projects —Oltre Financial

"Collaborating with Sobey School of Business and the Arthur L. Irving Entrepreneurship Centre has been a game-changer for us. Their expertise in developing our AI-based backend has helped us build the right model to drive innovation in the advertising industry."
—Ashwin Razdan, Co-Founder of Adrigo Insights

Creating Technology-Driven Marketing Strategies to Enhance Social Media

Adrigo Insights partners with brands and agencies to turn social media data into actionable insights across social media platforms. A business-to-business SaaS platform, Adrigo offers a unified set of metrics for social media measurement and benchmarking, enabling digital marketing managers to assess the effectiveness of their content and media investments.

The company was founded in 2023 by Katerina Msafari and Ashwin Razdan, graduates of the Master of Technology Entrepreneurship and Innovation Program at Saint Mary's University. In its early stages, Adrigo Insights benefited from the invaluable support of Dr. Ethan Pancer, Professor of Marketing in the Sobey School of Business at Saint Mary's University. Dr. Pancer and his research team provided strategic insights into the digital advertising industry, identified Adrigo Insights' ideal customer base, and offered clear recommendations for the company's growth.

The project advanced further with the guidance of Meredith Drost, Manager in Business Design at the Arthur L. Irving Entrepreneurship Centre. Meredith's expertise built on the initial research, helping Adrigo Insights develop a business plan that integrates media platforms and uses Artificial Intelligence (AI) for real-time content delivery.

"Our partnership with the Sobey School of Business and the Arthur L. Irving Entrepreneurship Centre has been transformative for Adrigo Insights," said Katerina Msafari, Co-Founder Adrigo Insights. "Their funding, mentorship, unwavering support and connections to the right opportunities have been crucial to our growth. They truly believe in the potential of students to build impactful companies."

Through these collaborations Adrigo Insights is leveraging cutting-edge technology and innovation to help brands maximize their impact and success across social media platforms.

Photo (L-R): Meredith Drost, Ashwin Razdan, Katerina Msafari

Wicked Problems, Innovative Solutions

To tackle the complex environmental challenge of understanding and measuring forests effectively, The Nova Scotia Department of Natural Resources and Renewables (NSDNRR) teamed up with the Wicked Problems Lab at Saint Mary's University. This partnership leverages advanced software and datasets to create innovative solutions for this local, national, and global problem.

> The Wicked Problems Lab serves as a learning hub for preparing undergraduate and graduate students for their careers.

Wicked Problems Lab research analyst Dr. Patricia Matsumoto and Dr. Mathew Novak, Director lead re-search focused on identifying old-growth forests, mapping forest changes over time, and forest landscape connectivity.

The research team is using several geospatial datasets to develop an Old Growth Forest Potential Index tool, which can be used to plan field activities and support land management decisions related to developments proposals such as wind farms. The research team has also been focused on applying the latest methodologies in remote sensing, geographical information systems (GIS) and machine-learning algorithms to understand forest gain and loss in the province in a historical time-series.

The seven students employed by the Lab for the forestry project have learned how to interpret remote sensing images, create, manipulate and edit large GIS datasets, use the latest geospatial software, and write reports and scientific manuscripts.

"Collaborating with the lab and students means we're using the latest geomatics tools and research methods, which aren't always accessible to our staff," said Dr. Peter Bush, Provincial Landscape Forester at NSDNRR.

Through its partnership with NSDNRR, the Wicked Problems exemplifies how academia and government can work together to create innovative, data-driven solutions for environmental sustainability and re-source management in Nova Scotia and beyond.

Photo (L-R): Sophie Kent-Purcell, Dr. Patricia Matsumoto, Dr. Peter Bush, Miranda Frison and Md Moniruzzaman

Smart Maps & Smartphones:

Virtual Guides Transform Tourist Experiences

Strollopia, is a virtual tour guide designed to help locals and visitors explore using their phone, is an interactive, community-driven app.

Its creator, Fundy Language Analytics Inc., specializes in artificial intelligence and machine learning for language applications. They found that keeping these maps current and engaging was a challenge, as manual updates are time-consuming and costly, especially for smaller communities.

When Fundy Language Analytics presented their challenge to Dr. Somayeh Kafaie a Professor in Mathematics and Computer Science, it was a perfect match for her expertise.

The research team utilized Large Language Models to engage visitors at geographic locations, sparking dialogues that generate user-driven insights. These insights are then transformed into map content, making the maps more dynamic and reflective of real experiences. The research expanded into AI-driven content generation, using real visitor impressions to create map content. The impressions were analyzed, stored, and curated by the map administrator for potential publication.

“Working with Professor Kafaie and Saint Mary’s University has been extremely rewarding for our company,” said John Read, CEO and Founder, Fundy Language Analytics. “Dr. Kafaie’s team brings a great deal of experience and enthusiasm to the project, and together we are making great progress on our research topic in AI and diverse uses of the technology for our business.”

With AI-powered tools like Strollopia, Fundy Language Analytics is paving the way for enhanced travel experiences, where visitors and local insights help shape the very maps they use.

Photo (L-R): Dr. Somayeh Kafaie and John Read

A Saint Mary's team is using AI technology to provide solutions

A Partnership to Diversify Revenue and Reduce Risk

The Citco Group of Companies (Citco) is a global network of independent firms. To diversify their revenue streams within the fund administration sector, Citco wanted to develop a document scraping application powered by generative AI.

To bring this vision to life, Citco partnered with Dr. Pawan Lingras, a Professor in Mathematics and Computing Science and the Director of the Master of Science in Computing and Data Analytics (CDA) Program, along with his team of Saint Mary's graduate students.

The research team used AI-driven solutions to streamline information retrieval, improve response accuracy, and enhance the user experience for a diverse range of professionals including fund accountants, technical personnel, and support staff.

The ongoing project has provided dozens of graduate students in the CDA program with valuable research internships, allowing them to apply their classroom knowledge in a real-world setting. Many CDA graduates have transitioned into full-time roles at Citco.

"Citco is at the forefront of financial services innovation through our collaboration with Saint Mary's University," said Chris Mitchell, Executive Vice President, Transformation Office, Citco, and Saint Mary's University alumnus. "By leveraging cutting-edge AI technology, we are increasing operational efficiency, improving client satisfaction, and reducing risk. This partnership has also enabled us to hire top talent from the university, launching careers for many graduates and benefiting both our organization and local communities."

Through this partnership, Citco is not only creating new revenue streams, reducing risk and costs, but also creating career opportunities for the next generation of computing professionals.

Photo (L-R): Chris Mitchell, Shahriar Swapnil, Dr. Pawan Lingras

Empowering
Small-Scale Producers

A Partnership for Global Food Security and Sustainability

A specialized agency of the United Nations that leads international efforts to defeat hunger, Food and Agriculture Organization of the United Nations (FAO) is working toward food security for all by ensuring regular access to sufficient, high-quality food for active, healthy lives.

Saint Mary's University (SMU) is engaged in a partnership with FAO through Dr. Tony Charles, Director of SMU's School of the Environment and a professor in the Sobey School of Business.

Dr. Charles has a long history of supporting local communities worldwide in their stewardship activities, protecting the environment while maintaining their livelihoods, and connecting with governments to advance policies that support these grassroots initiatives.

Working with FAO, Dr. Charles created a stewardship database and a framework to assess conservation practices and environmental stewardship among small-scale producers in fishing communities. The impressive range of such stewardship achievements has been published by Dr. Charles in FAO's report Environmental Stewardship by Small-Scale Fisheries.

"Dr. Charles's work on small-scale fisher stewardship, community-based management, and the link between climate change and poverty has been pivotal in removing obstacles faced by small-scale producers," said Dr. Daniela Kalikoski, Fishery Officer and Leader of FAO's Priority Area on Small-Scale Producers' Equitable Access to Resources, and Social Protection in Fisheries. "Saint Mary's University has fostered a unique environment that integrates scientific and local knowledge, offering critical insights for policy creation and governance that emphasize openness, collaboration, and inclusion."

This collaborative effort demonstrates the profound impact that integrating research, local knowledge, and global initiatives can have in empowering local people and their communities worldwide and building a more sustainable and food-secure future.

Photo (L-R): Dr. Tony Charles and Hasan Latif

Cooking up a Positive Impact on Easy Platter's Operations

As Canada's first on-demand personal chef service, Easy Platter offers a unique approach to meal preparation by enabling customers to hire personal chefs to plan menus and prepare high-quality, personalized meals.

To address operational challenges, Easy Platter collaborated with Dr. Yasushi Akiyama, a professor of Mathematics and Computing Science. Together, they designed a framework to calculate both ingredient costs and potential food waste for selected meal plans. With support from Vishnu Priyan Mahendran, a 2022 graduate student in the Master of Computing and Data Analytics program, they developed formulas and integrated them into the company's system, improving efficiency.

"Dr. Akiyama was extremely helpful in not just identifying great talent at Saint Mary's University but also collaborating with us throughout the project," said Mandhir Singh, Founder of Easy Platter and 2012 MBA Graduate from Saint Mary's University. "Vishnu has been a huge asset for Easy Platter and has contributed to multiple complex projects." Vishnu has been employed with Easy Platter since he graduated.

The second phase of the project linked ingredient data with its supply chain. This integration offers automated insights into food waste, which helps the team track sustainability. With nearly 4,000 recipes, the system can now predict how much food waste a menu will generate.

The team also explored machine learning algorithms to identify ingredients that could cause nutrient deficiencies and provided recommendations to enhance meals' nutritional value. This feature supports personalized nutrition plans, which are incorporated into Easy Platter's final database and user interface.

With these insights, Easy Platter reduces food waste while helping customers enjoy healthier, personalized meals—combining sustainability and wellness in every dish.

Photo (L-R): Mandhir Singh and Vishnu Priyan Mahendran

Harnessing Data to Reduce Food Waste

Mapping the Spread: Tracking COVID-19 Transmission Across Nova Scotia

Scientists and health officials are proficient at tracking how viral pathogens infect individuals. However, understanding how these pathogens spread geographically between neighborhoods or regions was a key challenge during the COVID-19 pandemic.

To address this challenge, Dr. Yigit Aydede, Professor of Economics at Saint Mary's University, led a multi-institutional study using new methodology and machine learning. Funded by Research Nova Scotia through the Nova Scotia COVID-19 Health Research Coalition, Dr. Aydede examined the factors driving the spread of viral pathogens like COVID-19 in Nova Scotia.

"This type of data that records symptoms as they arose, early in the pandemic, simply does not exist anywhere else in the world and is due to decisions taken by provincial health authorities that turned the Province of Nova Scotia, in effect, into a living laboratory," says Dr. Aydede.

Published in Scientific Reports, Dr. Aydede's study combined spatial and temporal analysis to predict viral spread, marking it as the first of its kind. The research identified 18 out of 112 communities in Nova Scotia as major drivers of viral transmission, characterized by specific vulnerabilities such as demographic and economic factors.

Stefan Leslie, CEO of Research Nova Scotia, praised the research, stating, "Better understanding relationships between viral transmission rates, air quality, and social mobility will help inform public health decision-making, optimize healthcare resources, and ultimately benefit Nova Scotians."

Dr. Aydede's work provides valuable insights by analyzing how viruses move across regions and over time, which may help predict viral spread and mitigate future outbreaks.

Photo (L-R): Dr. Yigit Aydede and Chukwuemeka Nwankwo

Providing Support—Together

Two organizations at Saint Mary's—the **Office of Innovation and Community Engagement (OICE)** and the **Arthur L. Irving Entrepreneurship Centre** have been working together to support the SMU community.

In the past five years, OICE has introduced dozens of companies to the Arthur L. Irving Entrepreneurship Centre, which has assisted companies with advancing their technologies and services by conducting research on market feasibilities. In turn OICE has supported many student entrepreneurs through discussions about funding opportunities, agreements, and intellectual property, and provides guidance in making more informed decisions on the next steps.

OICE teams up with the Arthur L. Irving Entrepreneurship Centre to offer training sessions for faculty on how to deliver a perfect pitch. Effective and concise communication is key for getting messages across when seeking funding support and collaboration. The pitch training is put into practice each year at OICE's annual Research Expo event, which provides faculty across Saint Mary's with the opportunity to share their research work with external partners.

Similarly, PhD and Applied Science students are provided pitch training by the Arthur L. Irving Entrepreneurship Centre, which helps students think about how their research may benefit different partners and fit into the market.

OICE and the Arthur L. Irving Entrepreneurship Centre share a common goal, to support faculty and students at Saint Mary's University and the university's industry partners.

Faculty and Student Support

The **Office of Innovation and Community Engagement (OICE)** meets with faculty and students on a regular basis to discuss proposed research projects and partners of interest. By sharing information, providing training opportunities and giving students a chance to apply their knowledge to real-life applications, faculty and students mutually benefit.

Lectures

OICE regularly gives lectures on intellectual property to classes including Chemistry, Engineering, and in the PhD in Applied Science program, to educate students on the best way to protect their ideas.

Events

Research Expo is an exceptional annual event at Saint Mary's University. It is an opportunity to bring the faculties of Arts, Science, and the Sobey School of Business together along with the research institutes and centres to showcase their work in the form of pitch presentations or displays. Companies and organizations can explore partnerships by learning about research expertise available at Saint Mary's University.

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