Partners in Innovation

Fanshawe College of Applied Arts and Technology

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Since 2005, the Centre for Research and Innovation (CRI) has supported innovation activities at Fanshawe College and throughout the region with our industry, business, and community partners. To date, we have participated in over 300 collaborative projects involving almost 200 Fanshawe faculty and staff with approximately 200 partners and 40 educational institutions. These projects have received over $500,000 in industry/partner contributions and close to $22 million in funding.

As this report attests, 2017 was a particularly successful year, with community and industry partners engaging College faculty and students in innovative and impactful projects. Of particular note are the SafeSpace project, a community-based transliteracy project for marginalized women, and our collaborations with two local businesses—Booch, a kombucha brewer, and Mikutech, a game development studio—all of which are profiled here.

CRI remains the College’s primary avenue for connecting industry with the state-of-the-art equipment and facilities, skilled faculty, and motivated students that make us an attractive partner for innovative research and development projects. We offer a suite of services, including needs assessment and analysis, project and proposal development, research, prototyping, and product testing and validation, that allow regional SMEs to meet their research goals, solve industry problems, and evolve with a rapidly changing economy.

We continue to grow and develop our community partnerships, as well, supporting social impact research with a tangible benefit to lives in Southwestern Ontario.

Through its work with community and industry partners, CRI drives Fanshawe’s commitment to providing all students with a research or innovation experience. Our projects connect external partners, faculty, and students, preparing the next generation to apply their energy and skills to the development of real-world innovations that will improve our communities and grow our economy.
Mikutech and Fanshawe join forces on War Room AR

Inspired by Canada’s significant contribution to World War One and the Battle of Vimy Ridge, London-based game development studio Mikutech is partnering with Fanshawe College’s School of Information Technology to create an authentic, virtual battlefield experience using cutting-edge technologies.

Mikutech’s gaming division, Joydrop, is an official developer for Microsoft’s HoloLens - a headset that blends virtual reality (VR) with augmented reality (AR) to form a new medium called mixed reality (MR). To put the technology in perspective, players are already accustomed to VR creating an artificial environment. Now, MR is integrating digital information into the user’s own space in real time.

Using the HoloLens headset, Joydrop’s new prototype - called War Room AR - enables players to generate terrain and digitally-produced military units onto a battlefield in any room. Simply by using the topography of a sofa, table or other furniture, infinite gameplay configurations are possible.

Assisting research costs, the concept garnered a $25,000 ENGAGE grant from the Natural Sciences and Engineering Research Council of Canada (NSERC). Facilitated by Fanshawe’s Centre for Research and Innovation, the NSERC-supported phase of the project is now successfully completed and Mikutech is seeking a commercial partner to help complete development of War Room AR.

Embracing Google Analytics

Innovative professor Liz Gray (left) considers the intuitive Google Analytics platform an amazing digital marketing measurement tool for business research. Seeing great potential in sharing the platform, Gray has collaborated with Liana Louzon (right) of Rocking Vibe Jewelry and 80+ companies willing to share their data, so students may learn. Gray also encouraged more than 170 savvy student teams to join the Google Online Marketing Challenge with huge success. Google acknowledged Fanshawe’s outstanding record in these international digital competitions using Google AdWords and Google+ and continues to partner with the Kinlin Business School Community Consultants in a pilot program matching student groups with businesses and nonprofits.

REACTR

About REACTR: REACTR is the applied research and media consultancy initiatives within the Interactive Media cluster of programs at Fanshawe College. The project-based activities that became REACTR emerged from curriculum initiatives in the Interactive Media program cluster that began in 2007. Interactive Media Faculty began to collaborate with companies in the London and Southwestern Ontario region to bring real-world, technology-based projects into coursework to enhance the experience for students in our programs.

Involving student teams as the core of these collaborative projects had significant educational benefits: The students had to work in teams with defined roles, and so find ways to work as effectively as possible. The technical and design demands of collaborative projects went significantly beyond the expectations within any single course or assignment, requiring independent research and problem-solving by the student teams. The students in general pushed themselves to excel in ways that we did not always observe in the classroom.

The response of student teams who participated in these projects was almost unanimously positive: some identified these projects as being one of the most significant learning experiences in their time at college. REACTR has collaborated on over 35 student-driven projects with over 100 students.

Rethinking education through applied collaborative technology research

With a goal to bring real-world, technology-based projects into its Interactive Media cluster of programs, Fanshawe has launched an innovative research initiative called REACTR. Supported by the College’s School of Contemporary Media and Centre for Research and Innovation, REACTR stands for Rethinking Education through Applied Collaborative Technology Research and operates as an applied research and media consultancy team for industry partners.

These project-based activities emerged when faculty began inviting companies in the greater London region to bring technological challenges forward, as a means of enhancing the student learning experience with actual business problems to solve, as a component of the coursework. Among the many companies liaising with REACTR is J/E Bearing and Machine Ltd., which manufactures a wide variety of custom metal machine parts, using state-of-the-art tools and production facilities.

Always honing workplace productivity, J/E owners asked REACTR to digitize printed training materials and job information, so operators could access details immediately, and supervisors could more readily respond to job-specific issues. Applying their technical expertise, the student team successfully developed a web-based information framework to enable operators to access all needed material via a web application running on Android tablets - without the need to leave their workstations.
Fanshawe on world stage with progressive x-ray research

As a researcher and professor with the Fanshawe College School of Health Sciences, Elizabeth Lorusso is internationally recognized for her collaborative work on reducing radiation dose levels in x-rays. Embracing the ALARA principle - an acronym for keeping radiation exposure “as low as reasonably achievable” for needed results - Lorusso’s research shows that advanced digital imaging technology no longer requires the same quantity of radiation as film-based x-ray images. Collaborating with colleagues at London Health Sciences Centre (LHSC) and Western University to complete the study, Lorusso shared her findings with the Canadian Association of Medical Radiation Technologists, the American Association of Educators in Radiologic Sciences and the International Society of Radiographers and Radiological Technologists World Congress in Seoul, Korea. Lorusso’s work is published in the Journal of Medical Imaging and Radiation Sciences and she continues to make collaborative connections across North America. She is a popular, global presenter on this topic - most recently invited to speak at a radiology conference in Vietnam. Lorusso is the proud recipient of a Fanshawe Distinguished Alumni Award, the 2017 Practitioner of the Year Award by the Ontario Association of Medical Radiation Technologists, the LHSC Scholarly Award and the Chair’s Award of Inspiration at Western’s Imaging Discovery Days.

Responding to a community need

Thanks to a two-year, $240,000 grant from the Social Sciences and Humanities Research Council of Canada, researcher Jodi Hall is continuing to address the social needs of marginalized women. Hall’s research builds on an earlier needs assessment through SafeSpace London - a drop-in centre for women in crisis. Now, with support from a community working group, and again liaising with participants at SafeSpace, Hall is researching “Women’s Empowerment through Collaborative Learning in Community (WeClic): A Transliteracy Project to Enhance Social Inclusion and Occupational Possibilities for Marginalized Women.” This project investigates how computer access and information literacy can help sex workers gain independence and connect with family and other vital supports.

Enhancing social inclusion for those living with autism spectrum disorder

Working together with compassion and optimism, Fanshawe’s School of Community Studies and Hutton House, which supports people with disabilities, are collaborating on a year-long Skills 4 Life learning program for adults living with autism spectrum disorder (ASD). Working together, Autism and Behavioural Science researcher Carmen Hall, Hutton House executive director Jeanette Dutot and their teams are pursuing scientific methods of interaction to positively influence potential for enhanced inclusion in society. Reaching beyond recreation and general life skills offered to adults with autism and other intellectual disabilities, Skills 4 Life is designed to teach participants through Applied Behaviour Analysis, which increases one’s ability to interact with others and gain a sense of belonging. This science is widely-implemented through the Ontario Autism Program for children up to age 18, and Hall sees benefit for adults too. Through applied strategies and differentiated instruction, ASD participants can learn to set a table using a placemat with drawings of utensils, sort laundry loads by matching a picture with an object and use a debit card or ride the bus solo. These positive outcomes increase independence and self-esteem, and enable some participants to secure employment, thus providing significant reason and rationale for future government funding to sustain the program.
Healing honey having sweet success in research with beekeepers and techies

Most people appreciate honey bees as a crucial part of our global eco-system, since they are responsible for the pollination and reproduction of 70% of agricultural products worldwide. Now, researchers at Fanshawe College are discovering these “busy bees” are contributing even more to society.

Embracing a popular trend towards natural remedies, and furthering evidence that honey holds health benefits for different wound treatments - from burns and infections to diabetic ulcers and flesh-eating disease, researchers Cheryl Ketola and Michael Jennings with Fanshawe’s School for Applied Science and Technology are examining the healing effect of honey. Working in partnership with the Ontario Beekeepers’ Association, the duo is collecting and analyzing honey samples from more than 50 apiaries across the province.

This project is funded through a $25,000 Natural Sciences and Engineering Research Council of Canada (NSERC) Engage Grant to Fanshawe’s Centre for Research and Innovation, and reinforces similar research underway at the Institute of Technology in Sligo, Ireland. The Irish research team confirms the efficacy of honey. Jennings and Ketola are also collaborating with London company iB4e Technologies Inc. to record the sample studies in a specialized database to further share information with fellow researchers, beekeepers and other stakeholders.

A team of dedicated honey researchers examines the medicinal components of Ontario honey.

Heritage grains making a resurgence thanks to Fanshawe research

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Heritage grains making a resurgence thanks to Fanshawe research

With a growing prevalence of dietary restrictions in today’s society, many food production companies are increasingly seeking alternatives to genetically modified grains. As such, Fanshawe’s Centre for Research and Innovation and its School of Tourism, Hospitality and Culinary Arts have collaborated to determine the viability of certain heritage grains for the Canadian market.

Looking specifically at einkorn and spelt, a five-month research project funded through a $22,000 Natural Sciences and Engineering Research Council of Canada ENGAGE grant was undertaken to develop and test commercialized sourdough bread utilizing these heritage grains. For the project, faculty researcher Josie Pontarelli and then-student Richard Placzek worked together to identify the most efficient preparation methods, optimal storage process, highest quality recipes and nutritional breakdown of the grains.

At the project’s culmination, the research team presented results to industry partner, Roger Rivest Marketing Limited, an organic grain marketing company, which is now using the results to help determine the cost and benefit of promoting einkorn and spelt to Canadian growers and producers. In doing so, innovative bakers, like Placzek of Whole Grain Hearth Bakery, are successfully reviving centuries-old heritage grains and in-house flour milling to produce delectable, digestible and nutritious breads and treats.

Booch ancient elixir heals gut disturbances

The process of digestion and absorption is among the most important to our health. Hippocrates, the father of modern medicine, made this statement over 2000 years ago and Shannon Kamins, founder of Booch Organic Kombucha, considers it truer today than ever before.

Believing fermented beverages are the basis for vibrant living, Booch offers this ancient elixir of yesteryear to heal gut issues, one bottle at a time. Kombucha is a naturally carbonated beverage made by fermenting black, green or white tea and sugar, with a culture of bacteria and yeast (SCOBY). As with all fermented foods, a trace amount of alcohol can be present in kombucha, and there is no accurate method currently available on the market to measure its content during the brewing process.

In response, Booch has identified a potential new product - a kombucha ethanol content measurement kit, which would consist of a detailed protocol outlining a proven method. To explore this potential new product, Booch is collaborating with researcher Karen Buchholz with Fanshawe’s School of Applied Science and Technology and a student research assistant to develop and compare three different methods. The results of the project will assist Booch in expanding its market and ensuring safe kombucha products for all ages and potentially new industry standards in the accurate measurement of ethanol in kombucha.

Instilling confidence through firsthand research

Working alongside her professor on the Booch research project, Chemistry Laboratory Technology student Trisha Tran gained understanding far beyond regular class work, and a greater appreciation for dedicated Fanshawe faculty.

“Experiencing the intricacies of an engaged teacher and an innovative industry partner, while transitioning a research method from the lab into a busy processing environment was amazing!”

Also, seeing the business side of the project provided Tran with insight into how proven methods are communicated and utilized outside of education.

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Professor Martin Volkening, School of Applied Science and Technology

Since arriving at Fanshawe a decade ago, Martin Volkening has worn multiple hats as professor, project manager and primary investigator. Actively involved in numerous and varied research initiatives, Volkening’s contributions range from a partnership with 3M Canada looking at turning walls into solar collectors to investigating what a modern bed bug trap should look like.

Always the epitome of professionalism and creativity, Volkening is a champion of project management and involving industry partners to enhance curriculum. Furthering this goal, he collaborated with FreePoint Technologies Inc. to study a productivity tool in manufacturing that deploys real-time data collection for measuring overall equipment efficiency.

Succeeding as the College's first Projects Integration Coordinator tasked with embedding industry-driven tasks into the classroom and lab setting, Volkening has inspired similar positions across the College – providing more students with valuable real-world experience.

As such, the research that Volkening and his team have performed is not only important to the College in terms of providing professional development opportunities for faculty and to train students, it has increased the profile of providing professional development opportunities for more students with valuable real-world experience.

The President’s Distinguished Award for Research and Innovation recognizes a current employee who has demonstrated excellence in research or innovation at Fanshawe College.

Professor Liz Gray, Lawrence Kinlin School of Business

Appreciating the merit of marketing in the digital age, once Liz Gray learned about the intuitive Google Analytics platform, she discovered a new passion and an amazing marketing measurement tool for business success.

Seeing great potential in sharing this innovative platform with local companies, organizations and her business students, Gray launched the first-ever Canadian digital marketing, post-secondary professional courses incorporating Google certifications.

As an exciting way to hone new skills, Gray also encouraged many of her protégés to apply to the Google Online Marketing Challenge - a unique opportunity for students to experience and create online marketing campaigns using Google AdWords and Google+, provided with a $150 budget from Google, each student team developed and ran an online advertising campaign for a specific business or nonprofit over a three-week period.

Under Gray’s leadership, many perceptive Kinlin teams earned international wins, and Google hailed the College for fielding more than 170 Google Challenge teams over seven years. News of the College’s digital marketing acumen continues to grow, as dozens of entities annually approach the Kinlin School of Business, as a means of improving their online visibility and gaining traffic to their websites, by collaborating with knowledgeable students studying search engine marketing.

For more than two decades, Jodi Hall’s multi-faceted work in teaching and research remains focused on eliminating conditions that contribute to vulnerable women living on the margins of society. With an overarching goal to reduce the crossover impact of poverty, addiction, trauma and stigma – particularly in the context of mothering - Hall is passionately committed to community-based research and helping all women share, learn and grow together.

Liaising with SafeSpace London, a support centre for women in crisis, Hall previously conducted a College-funded, community-based needs assessment with sex workers regarding their desire to learn to how to use computers and the Internet.

More recently, Hall secured a significant Social Sciences and Humanities Research Council of Canada (SSHRC) Partnership Development Grant from the Community and College Social Innovation Fund to investigate the impact of improving digital literacy among marginalized women. The project is entitled “Women’s Empowerment through Collaborative Learning in Community: A Translatory Project to Enhance Social Inclusion and Occupational Possibilities for Marginalized Women.”

Underscoring Hall’s collaborative leadership style, her working group includes community members from Western University, Family Service Thames Valley, Literacy London and the Centre for Research on Health Equity and Social Inclusion.

Building on a philosophy of creativity and innovation instilled in Fanshawe’s downtown Centre for Digital and Performance Arts, Robert Haaf (left) is growing a research culture within the School of Contemporary Media.

In his leadership role as Interactive Media Specialist Coordinator, Haaf and his fellow professors and staff have collaborated with more than 30 industry partners, including the International Erosion Control Systems (IECS), to embed an array of real life research projects into the digital curriculum.

Resulting from a growing applied research network, Haaf was instrumental in forging a faculty, staff and student consultancy team within the Interactive Media cluster of programs. It is REACTR, with a focus on rethinking education through applied collaborative technology research. REACTR’s goals nicely align with the province’s goals toward building an innovative and creative culture to meet the needs of Ontario’s future workforce.

According to Haaf, London’s best economic news story is the amazing growth of its digital media sector. Seven years ago, 80% of program graduates had to go to Toronto or beyond to find work, and today, 85% stay in London with exciting jobs and prosperous futures. Reinforcing this digital growth, Haaf consistently connects with business to monitor market trends influencing education.

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Professor Robert Haaf, School of Contemporary Media

Professor Liz Gray, Lawrence Kinlin School of Business

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Professor Jodi Hall, School of Nursing

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A Big Vision for Small Living Solutions

Have you ever considered the sheer size of a shipping container? Fanshawe student entrepreneur Greg Nakoneczny has and he believes these mammoth structures provide great potential for flexible, environmentally friendly homes. Through his company, FR8 Living Solutions, and the backdoor of a “tiny house” social movement across North America, Nakoneczny envisions net-zero energy, modular housing - with a goal to drastically reduce the traditional cost of building and travelling quality homes.

As a social enterprise, FR8 utilizes shipping containers, green technology and modular interior systems to produce adaptable, sustainable and progressive living spaces, without harming Mother Earth. Nakoneczny cites significant environmental and economic merit in repurposing countless empty shipping containers as future living spaces. Designed to withstand 100 years at sea, these prefabricated structures have high durability and are easy to modify.

FR8 incorporates green technology with solar panels, energy storage, gray water recovery and a home management system to control energy use. In addition, attractive modular interior systems with customizable and recyclable panels are easy to install and modify, without producing waste - thus saving the planet from usual building waste. With this innovative technology, FR8 homes offer clients an opportunity to reside off grid in sustainable and progressive living spaces.

Launching Fanshawe Farm Market

The enterprising, 10-week Fanshawe Farm Market Taste Test Booth was designed to allow faculty and student teams to collaborate with food producers and processors to introduce new products through two farm market sites in Waterford and St. Thomas. The teams provided samples to consumers, sought feedback through surveys, prepared brief market analysis reports to guide next steps for the farm producers and informed funders of the project results. The goal of the Market was to provide an interactive way for Fanshawe to collaborate with growers to promote a start-up food culture in Southwestern Ontario, and it was hailed a huge success!

Planting rural roots in Norfolk County

Growing up on a small family farm, with almost every type of animal, Sonja Irwin has strong roots in agriculture, coupled with an entrepreneurial spirit. With a dream of owning a farm business and sharing a love of agriculture with their children, Irwin and her husband relocated from Georgetown to a 10-acre farm outside Waterford in Norfolk County. They call it Rural Roots Family Farm, with hope it will continue into the next generation of the Irwin family.

As a recent graduate of Fanshawe’s Agri-Business Management program, Irwin serves as owner/operator of the enterprise and believes her studies at the College’s Simcoe campus strengthened her farm business plan, especially in the area of accounting. The focus of Rural Roots Family Farm is on beef cow and Irwin also works at a local farm that produces farm-to-table dairy products.

Applying her expertise, Irwin was also chosen to co-lead the launch of the Fanshawe Farm Market at the Waterford Farmers’ Market in Norfolk County and the St. Thomas Horton Farmers’ Market in Elgin County. This interactive community outreach program proved an excellent forum to partner with local producers to help launch new products and conduct market research.

Paramedic research education among most comprehensive in Canada

Amid challenging situations as first responders, paramedics must perform demanding and meticulous interventions, while balancing head, heart and hands in times of emergency. Recognizing this unique opportunity for continuous learning, Fanshawe’s Primary Care Paramedic research education is one of the most comprehensive in Canada.

With an aim to increase research literacy, which is an ability to interpret and understand research findings, and to increase research capacity within the future paramedic workforce, Fanshawe students conduct research studies based on their own learnings and experiences.

Centered on a belief that encouraging scholarly activity by paramedic students is essential to the development of the profession as a whole, the College strives to provide an authentic educational experience combined in paramedic practice, and applicable to the needs of the practicing paramedic.

To date, more than 180 paramedic students have completed over 55 student-led research projects, ten students published their work in peer-reviewed venues, and several students and graduates have presented at local, national and international conferences. Under scoring the merit of this program’s research-focus is news that School of Public Safety Professor Alan Batt is the 2018 recipient of the Paramedic Association of Canada Award of Excellence for Leadership and Community Building.

Research means continuously improving patient care

Every aspect of the Paramedic program is designed with research and innovation in mind. From working in teams on studies of their own design to applying newfound skills and knowledge as advocates for change and improved patient safety, continuous improvement is the goal. Sharing her thoughts on evidence-based education in the classroom, Fanshawe Paramedic student Isabelle Love excelled as a panelist for the Paramedicine Across Canada Expo (PACE) in Quebec.

“Thanks to our comprehensive program, we are honing the knowledge and skills of a paramedic with the important research process needed to advance our profession with a continuous goal of improving patient care outcomes.”

Engaging a new generation of researchers

“The mentorship of seasoned researchers and colleagues, we can embrace extensive primary research through to manuscript formation and submission for peer review publication.”

The future of paramedicine is evidence based. With the Paramedic program and the Centre for Research and Innovation working in tandem, Fanshawe has an ability to produce engaging, knowledgeable, competent researchers making a direct and positive impact on numerous facets of paramedicine. Case in point, graduate Paige Mason and fellow collaborators are excited to investigate Female Leadership in Paramedicine (FLIP) to gain understanding of women at senior leadership levels in Paramedic Services, Colleges and Base Hospital Programs in Ontario.
Stakes are high in today’s competitive global market. Only those products that demonstrate indisputable quality, while meeting regulatory standards, become successful. That is why Fanshawe’s new Canadian Centre for Product Validation (CCPV) is a game-changer for local business and the national economy.

Unlike any other testing facility in Canada, CCPV is uniquely designed to bridge the gap between innovation and commercialization. Since opening for business in 2016, the Centre’s leading-edge validation technologies and equipment are conducting electrical, mechanical, performance, environmental and thermal analysis – all under one roof. The 25,000-square-foot Centre is located in London’s Advanced Manufacturing Park on a 10-acre parcel of land donated by the City. The total project is valued at $16.2 million, with half the funding made possible through the Federal Economic Development Agency for Southern Ontario.

This world-class facility is enhancing London’s and Fanshawe’s position as a national leader in innovation and product validation, and is capitalizing on new opportunities supporting Canada’s ability to retain and create jobs, and improve prosperity. Striving to help firms mitigate risks and access markets faster than ever before, CCPV is also engaging talented Fanshawe students in research, innovation and discovery, and creating spin-off jobs at local companies.
Accentuating the positive by measuring, analyzing and sharing data

Appreciating that time is money in manufacturing, FreePoint Technologies Inc. and Fanshawe’s School of Applied Science and Technology collaborated on an industry-academic research project to deploy real-time data collection for measuring overall equipment efficiency (OEE) as a productivity tool.

FreePoint’s unique technology, called Shiftworx, connects plant floor manufacturing processes directly to operators in innovative, practical and cost effective ways. According to company president Paul Hogendoorn, “what gets measured, gets improved.” So, rather than measuring downtime, inefficiencies and waste, FreePoint focuses on the positive, by proving productivity increases - if you measure, analyze and immediately share outcomes with invested machine operators, who in turn instantly assess and improve the manufacturing process.

The six-month project, jointly funded by an NSERC Engage grant and an Ontario Centres of Excellence Voucher for Innovation and Productivity, took place at two manufacturing company test locations in Southern Ontario. This research benefits the manufacturing industry by identifying the untapped potential of real-time data and employee engagement, as a process productivity strategy. Its commercialization will lead to job creation and provide Canadian manufacturers with a competitive edge and an advantage in attracting skilled, young workers to a traditional sector that is redefining itself with the integration of leading-edge technology.

Learning through collaborative research

“I was thrilled to be offered a fulltime position at FreePoint undertaking quality assurance testing for the software developers and assisting the research and development engineer. Working at FreePoint is rewarding and fun, and the people are great!”

Bringing an innovative perspective to all she does, Electrical Engineering Technology graduate Leah Tomaszewski (far right) loves a challenge and often collaborates on technology-based research projects. From programming an A&L Canada Laboratories robot to weigh different containers of dirt to re-programming an automated greenhouse featured at Fanshawe’s Queen’s Park Research and Innovation Day, Tomaszewski shines as a great team player.

An innovative stroke for Hudson

At the highest levels of competitive rowing, every stroke counts as finely-tuned athletes pull their boats through the water at speeds reaching 20 kilometres per hour. A fraction of a second can mean the difference between being the best, or being part of the rest. Looking for an edge, top-flight rowing teams, including many national programs, turn to London-based Hudson, one of the top three manufacturers in the world producing custom, hand-crafted Olympic class rowing shells.

In its tireless pursuit of developing lighter, stronger and faster boats, Hudson previously partnered with Fanshawe’s Centre for Research and Innovation to design and build a first-of-its-kind mechanical test stand capable of determining the precise stiffness of a boat, which is a key measure of performance. Checking in, Hudson reports the stand has gone far beyond its original purpose, and today, it is used daily to test all new boats, repair boats and for some benchmarking.

Hudson calls the test stand its “secret weapon” providing a clear edge over its competitors. So, the company has no intention of commercializing it. And, plans are already in motion for Hudson to attend the 2020 Summer Olympics in Tokyo supporting Rowing Canada and other select crews.

Embracing “friendly” bacteria for better oral health

For several decades, the frontline defence against cavities and other oral health issues has focused on removing bacteria. To date, brushing and regular dental cleanings are viewed as the best tools for maintaining healthy mouths. Yet, joint research by London-based biotechnology startup Stellar Biome Inc. and Fanshawe’s Centre for Research and Innovation suggests embracing bacteria - rather than fighting it - can help lead to better oral health.

Supported by a three-year grant through the Natural Sciences and Engineering Research Council of Canada (NSERC) Applied Research and Development Fund, the research team is evaluating activity and analyzing multiple clinical trial samples to demonstrate the benefits of two new oral probiotic products developed by Stellar Biome to repopulate “friendly” bacteria in the mouth.

The clinical goal of these novel patented lozenges, Dentaq BioGem™ to help reduce throat infections and Dentaq Trio™ to reduce cavities, is to restore the mouth’s natural microflora balance, thereby reducing inflammation and tissue damage. Because oral health issues contribute significantly to several systemic diseases, the successful development and commercialization of these innovative probiotic products has potential to improve the overall health of countless Canadians, and to establish Stellar Biome as a leading provider of probiotic therapeutics.

FreePoint Technologies Inc. employs many Fanshawe grads to develop their unique productivity monitoring software.
Fanshawe’s Centre for Research and Innovation (CRI) serves as the central point of liaison for industry, business, and community groups wishing to connect with Fanshawe researchers to develop new and innovative research projects or programs. We provide many services including assistance from proposal development through to the funding application and project administration.

Engaging our partners:
Fanshawe engages in many forms of research including applied, creative, scholarship and community based. We facilitate projects in areas such as technology, the arts, humanities, social sciences and health.

We work with partners in a variety of ways:
• Curriculum integrated projects
• Capstone collaborations
• Externally-funded collaborations
• Fee for service

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Contact us to discuss your opportunity:
T: 519-452-4430 ext. 4703
E: research@fanshawec.ca
1001 Fanshawe College Blvd, London, ON

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Project development - from concept to commercialization
With you, every step of the way, with the support of industry experts and college resources.

Identification of funding sources
Tri-Council eligible, we will connect you with granting agencies to propel your ideas forward.

Prototyping, testing and validation services
Validating and testing your products and services to help your company compete globally.

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Putting knowledge to work for you.

BY THE NUMBERS
Since 2005

Collaborated with organizations including business, industry and community partners

40
EDUCATIONAL INSTITUTIONS

326
PROJECTS

191
EDUCATIONAL INSTITUTIONS

$501,963.44
CONTRIBUTIONS FROM PARTNERS/INDUSTRY

193
PROJECT INVOLVEMENT FROM FACULTY AND STAFF

202
~$21,194,446.87
EXTERNALLY AWARDED GRANTS/CONTRACTS

124
~$751,719.87
INTERNALLY AWARDED GRANTS

1817

142
$501,963.44
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