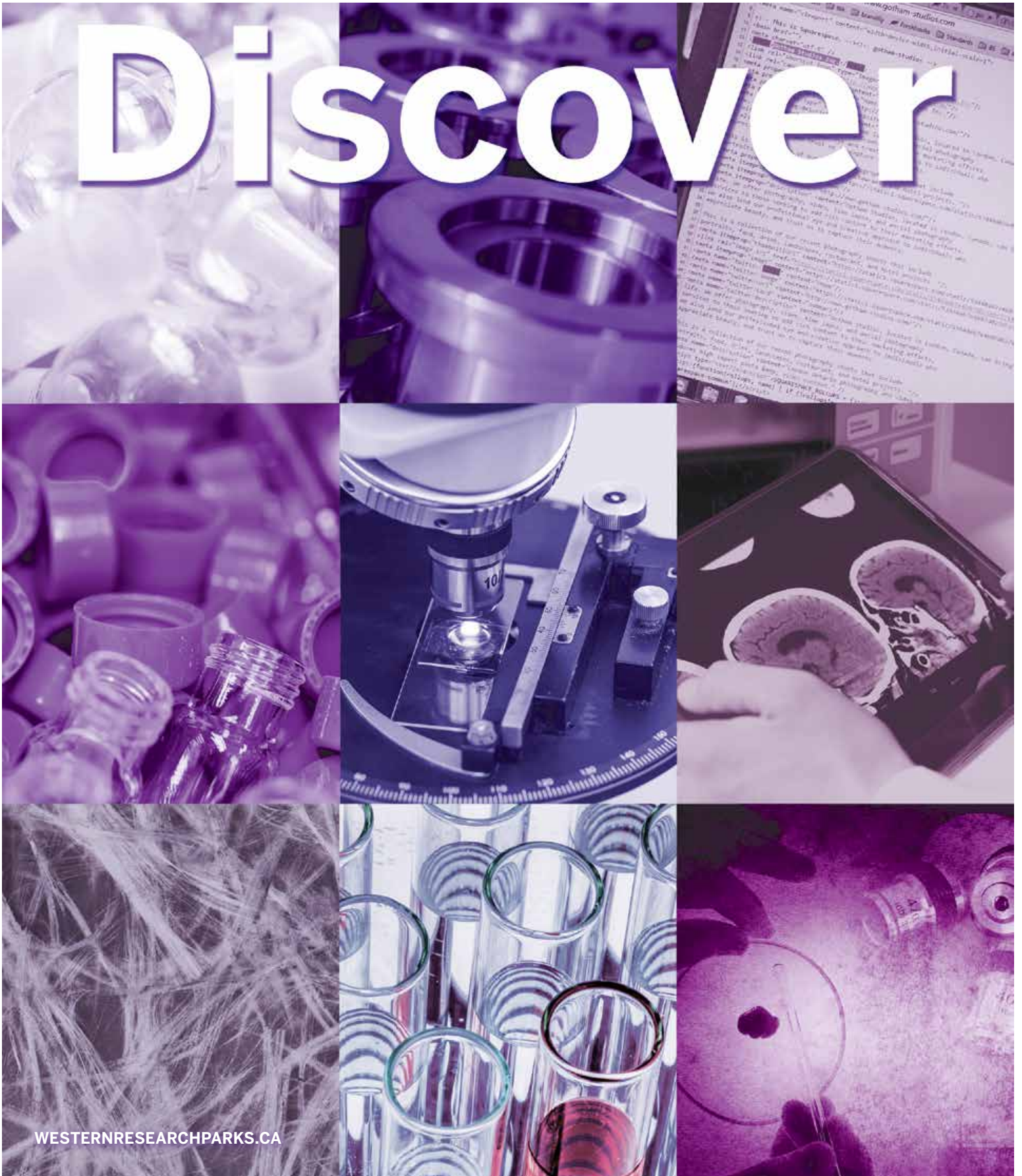


Discover



WESTERNRESEARCHPARKS.CA





To Our Clients, Partners and Stakeholders



Executive Directors (L-R): Tom Strifler, Paul Paolatto

It is our distinct pleasure to share with you our third Annual Report under the new Western Research Parks banner. As the title of this Report implies, Western Research Parks continue to serve as a magnet for new business, new ideas and new inventions. The Parks are proud of their role as material contributors in the region's economic ecosystem, and prouder still of the many high-tech companies, both large and small, that now refer to one of Western's three Research Parks as their home.

Therefore, it should be no surprise that over the past year Western Research Parks continued to build upon its impressive track record as a destination for technology and talent.

For example, Western Research Park campuses in both London and Sarnia-Lambton have achieved record occupancy levels while advancing the innovation and wealth creation agendas in each of their respective communities.

Western Research Parks have also contributed to the growing reputation of the region as a hub for research, commercialization, and new business development activity, as prospective scientists, clinicians, engineers and entrepreneurs increasingly seek out the Parks and their partners to aid them in the progression of their products and processes from concept to market.

Western Research Parks also continue to work collaboratively with all of the region's exceptional post-secondary institutional partners. Our Park tenants and support teams are delighted to be so closely associated with the research, testing and validation capabilities at Western University,

Lambton College and Fanshawe College, and are anxious to explore new ways to expand these partnerships even further. The Parks also continue to work closely with several local economic development partners to find new means and methods of attracting and retaining local industry.

Western Research Parks are also actively pursuing new sources of capital to refine its existing infrastructure and invest in some additional capacity. The Parks continue to serve as beacons for the region's economic ecosystem and their ability to accommodate new entrants and global players is critical to the region's continued evolution and expansion.

Finally, the Parks continue to introduce new programs, new services and new business development opportunities to its tenants with the expressed intent of building upon its culture of accomplishment.

Once again, Western Research Parks is very pleased to showcase a few of the Parks' more notable tenant success stories from the past year. We have also highlighted some of our own key performance metrics to help illustrate our continued progress over the past year and promise for the future.

Western Research Parks will continue to act as an enabler of economic and social good in Southwestern Ontario. We are very proud of our achievements to date and look forward to even greater success in the years to come.

Paul Paolatto

Executive Director
Western Discovery Park
Western Advanced Manufacturing Park

Tom Strifler

Executive Director
Western Sarnia-Lambton Research Park

Ours is an Ambitious Goal...

... one that may never be completely attained, but one that must be sought nonetheless and one that serves as our core purpose. Namely to be:

- > a place, a destination, a home where talent and technology, industry and invention, dreams and discoveries converge to contribute extraordinary creations to our world and our future
- > an enabler, principled in all dealings, positive in approach, and uncompromising in values
- > a catalyst that anticipates needs, responds to requests, and continually seeks the means and methods that can help all those that share in the quest, reach their own goals
- > relentless in the pursuit of forms and formulas that can help create economic and social good today and tomorrow



Western Discovery Park

Park Team (L-R): Jennifer Dawe, Paul Paolatto, Julia Hoare, Terry King

Over the past 25 years, Western's Discovery Park has had the distinct privilege of serving as the first home to a number of well-regarded high-tech companies in London and the surrounding region. The Park has also witnessed a number of very strong business people emerge from within these companies and watched them assume leadership roles in organizations across the region and around the world.

What makes this evolution even more exciting is that the Park continues to bear witness to the high-tech superstars of tomorrow and welcomes the opportunity to play a small role in their growth and maturation.

In the pages that follow, the Park is pleased to introduce a few of those future superstars and the companies that they are building each and every day. The Park is also pleased to share the stories of a few of its larger tenants, those entities that work closely with researchers at Western and throughout London to help build our economy and allow the Park to continue to offer its services in a financially self-sustaining manner. We could not be more proud of our Park tenants, their teams and their track records. They ensure London's high-tech legacy and position the region for continued success in the knowledge economy.



Western Discovery Park/Advanced Manufacturing Park Board of Directors (L-R): Gitta Kulczycki, Paul Paolatto, John Capone, Hanny Hassan, Lynn Logan
Absent: Chirag Shah, Rick Campbell



Propel: Ian Haase

MVP Lab: Deniz Temelli



MVP Lab (L-R): Paul MacLean, Dustin Hill, Julide Cakiroglu, Kevin Vansteenkiste

PROPEL

“A front door for young entrepreneurs” is the goal of Propel, a Western University initiative to help talented students create businesses with staying power.

Ian Haase is the Director of Propel and says their mandate is to identify high-potential student entrepreneurs. “We have worked with 100 start-ups since September,” he says. “At least 20 of them are now producing revenue.”

In May 2015, Propel launched PSI, a summer incubator that nurtures students on break and keeps them in London. “Seven companies were selected through a competitive process – they had to be making revenue to get into the incubator,” says Haase. “They are given \$7,500, designated co-working space, mentors and other services.”

PSI wants to help students scale their operations faster. “Propel tries to give them the support so that they can stretch their seed funding as far as possible,” says Haase. “We want to move them forward with a team as far as we can without requiring further investment.”

Haase points out that many tech companies in London, like Voices.com and Raceroster, have matured into high-growth companies that are now in a position to give back. “All of our mentors are young and relatable to the students,” he says. “We think there is enough happening in our community to inspire young entrepreneurs to stick around and build their business here.”

Haase, an Ivey graduate, is well connected to the business school, and to TechAlliance, where he once worked, as well as grassroots agencies that support the City’s growing roster of entrepreneurs. “The Western Research Parks program has also been a strong supporter,” he says. “They are great partners for students who are making real progress, by allowing them to set up operations at the Park to help them reach the next level.”

MVP LAB

MVP Lab stands for Minimum Viable Product – what a start-up needs to show a potential investor. Located in the Western Discovery Park and funded in part through a grant from the Ontario Trillium Foundation, the MVP Lab is a launch-pad for early stage entrepreneurs developing working prototypes in digital technology, life sciences and manufacturing.

Deniz Temelli is the Manager at TechAlliance in charge of the MVP Lab. She says their services help start-ups cross what venture capitalist call the ‘valley of death’ between a good idea and prototype. Entrepreneurs can collaborate with experts, at no cost, to transform their vision into a viable product. “It can be expensive to get a product built out,” she says. “We work with web developers, graphic designers and app developers to build prototypes or get screen shots for grant applications and VC pitches. They can work with our designers at no cost for ten hours or bring in their own service provider.”

The program benefits include a suite of support services offered by TechAlliance such as mentoring, help with grant writing, access to tools and materials (including a 3D printer and CAD software), and a range of networking opportunities. “Western Research Parks is a great ecosystem,” says Temelli. “The physical, co-working space here is flexible and there is a lot of infrastructure at a very low cost.”



MVP Lab Grand Opening (L-R): Paul Paolatto, Western Research Parks; Marilyn Sinclair, TechAlliance; Deb Matthews, MPP (London North Centre), Deputy Premier; Steve Trujillo, Ontario Trillium Foundation; Gitta Kulczycki, Western University



COMET BIOREFINING

Bio-based chemicals made from non-food bio-waste, like forest residue, wheat straw, corn stover and other agricultural waste, are an important source of non-hydrocarbon feedstock. Making these products cost-effective has challenged industry.

Dr. Andrew Richard, Founder of Comet Biorefining Inc., a Western Discovery Park tenant in the Stiller Centre, believes they have developed a low-cost process that converts cellulosic biomass into a high-quality, competitive glucose feedstock. Richard says what differentiates Comet Biorefining is the use of smaller facilities. "The process of converting most biomass is high-cost and capital intensive," he says. "We tackled key cost drivers, reduced the size of the plant, and moved it closer to the source of the biomass."

Richard says the Comet process further differentiates itself in the high quality glucose produced. "We have developed IP around a

lower-cost, higher-quality cellulosic glucose product that opens the door to the biochemical market as well as biofuels. We have proven the demonstration scale at a partner site in Europe and can process 5-10 dry tonnes per day," he says. "Sites for our first commercial facility are being explored and we have closed financing with Sofinnova Partners."

Richard says their niche is in a higher-margin bio-industrial market, with large, brand-name manufacturers who want to make their products more environmentally friendly. "The emerging technologies are in bio-plastics and chemical building blocks," he says. "If you can produce a more sustainable additive at equivalent cost and performance, they are interested."

Richard appreciates the support he has received from Western Research Parks. "We were able to accelerate our timeline because our lab space here in the Park has been helpful," he says.

Comet Biorefining (L-R):
Andrew Richard, Dennis D'Agostino





LCS Laboratory: Raisa Stadnichenko



Ivey Publishing (L-R): Ashley Woytaz, Nathan Spence, Matt Quin, Sheryl Gregson, Brenda Vouvalidis

LCS LABORATORY INC.

We live in a world of chemical genius. Plastics, packaging, medicines, personal care products, paints, adhesives and fuels – we depend on countless chemical formulations to improve our modern lives. The convenience we enjoy can sometimes come at a price: substances like asbestos, formaldehyde, lead, and other compounds, when airborne, can harm human health at home and in the workplace.

LCS Laboratory Inc. is an air quality expert. They offer a broad range of testing that includes environmental testing and indoor air quality testing for industrial and residential clients. Dr. Stepan Reut is the Founder and President of LCS Laboratory. He says their background in engineering and science gives them a unique ability to both measure emissions and advise clients how to reduce them. "This is a health and safety laboratory and we test anything that can poison you," he says. "Our laboratory is accredited by the American Industrial Hygiene Association to ISO 17025 standard. There are only four labs in Canada that can do this testing. We are not a 'mass production' laboratory. Each solution is custom tailored."

Reut says they specialize in protecting workers and those who handle and transport dangerous goods. "We help health and safety departments and make sure they are in compliance with Ministry of Labour regulations," he says.

Reut founded LCS in 2010. As a PhD in chemistry, he finds it beneficial to have his laboratory in the Stiller Centre at the Western Discovery Park. LCS neighbours include bio-tech and medical products companies with expertise in advanced scientific fields. "We don't compete because we are different but we share ideas. We also feel connected to the University here and have access to the best minds, labs and facilities," he says. "For our clients, these resources are a big deal."

IVEY PUBLISHING

Ivey Publishing supplies thought leadership content of the highest quality to a global customer base, all from Western's Discovery Park.

Matt Quin, the Director of Ivey Publishing, says they tap into demand for case studies from business schools as well as high schools and corporate consultants. He says their partners in case study production and distribution, like Harvard University, are top-notch.

Quin says they are vigilant about protecting copyright and their teaching material – over 36,000 products in nine languages. "Only approved users get access to the teaching notes and we hold on to that dearly," he says. "Piracy is a growing issue and challenge. We monitor the brand on a daily basis and do take-down notices."

Ivey Publishing receives case submissions from a range of organizations worldwide and quality control over what gets published is managed by the Richard Ivey School of Business. Cases cover a multitude of industry sectors and core business subjects like marketing and management.

Case studies often explore where business took a fork in the road. Instructors are extremely engaged in the case but refrain from providing their own opinions. Instead they challenge students to devise innovative solutions. "Good case teaching is dynamic and entertaining to watch," says Quin. "It's not a lecture, you are in it."

Ivey's bestseller lineup changes all the time. "Starbucks is number one right now but Lululemon and Target are popular and so is Tesla in China," he says. "Students love that some cases are still in the news."

Quin says their meteoric growth has been fully supported by Western Research Parks. "There is a certain energy here that transfers to our office," he says. "Big ideas are important and the Discovery Park creates an environment where that can happen."

Over the past year, Western University has begun redirecting its resources from building the Park infrastructure to marketing its research, development and commercialization capability. In the past twelve months, Western's Advanced Manufacturing Park (AMP) has welcomed many unique visitors including industrial interests from Europe, Asia and Central America. AMP has also played host to a number of public and private sector events and served as the primary venue for two major public announcements including one from the Prime Minister of Canada.

AMP has also added to its tenant roster and expanded its capacity to conduct advanced materials testing across a broader range of materials and sectors. Western will continue work with its partners at the City of London and Fanshawe College to build out this impressive campus and looks forward to more promising announcements in the coming years.

THE PARK BEGINS TO TAKE SHAPE

Commensurate with last year's Grand Opening of the Collider Centre, Western Research Parks immediately embarked on the development of a new Master Plan for the 30 acre parcel in the City's south end to help position the new campus as the hub for the next generation of manufacturing in Canada.





Advanced Manufacturing Park aerial looking north

Specifically, the Research Parks' team, in partnership with its counterparts at Fanshawe College and the City of London, initiated a comprehensive upgrade of the initial Park with three goals in mind:

1. *The Park design must be unique, edgy and energetic, reflective of the market sector it expects to serve.*
2. *The Park design must be integrated, reflective of three independent entities coming together to create something bigger and better.*
3. *The Park design must be collaborative, one that creates the necessary conditions or "collisions" between research and industry to stimulate innovation.*

In response, Western University, Fanshawe College and the City of London are all actively engaged in the design of AMP. The partners have agreed that the Park will develop and maintain a contiguous layout designed to create a sense of community, efficiency and connectivity. The partners also hope to design each facility in a modern, aesthetically progressive design that radiates renewal, confidence and ambition. Finally, the team is committed to a modular design approach to ensure that future development matches market needs.

AMP is currently home to three facilities and approximately 20 researchers and industry partners. Its ample meeting space and convenient location along North America's busiest commercial highway allows it to play host to numerous business development meetings and special events. In 2016, AMP will serve as the new home for Fanshawe College's Centre for Product Validation, an exciting state-of-the-art product testing and validation centre that will dramatically accelerate the design, development and commercialization of products worldwide.

Western Research Parks is extremely proud of its role in advancing this impressive new campus and looks forward to its continued growth and development as Southwestern Ontario begins to reclaim its leadership role in the manufacturing sector.



ADVANCED MANUFACTURING PARK EVENTS

In the last year, AMP has hosted numerous events celebrating visits and announcements from across the globe. Below are some photos from those events, along with some memorable quotes.



Seeing Angels: One of the many benefits afforded to local entrepreneurs through their affiliation with Western Research Parks is the ability to network with its many business development partnerships. For example, Discovery Park is home to the Southwestern Ontario Angel Group, one of the region's largest and most active angel networks. It is also a regular host for the Keiretsu Forum, one of the world's largest angel networks that now includes London as one of its stops in Southwestern Ontario.



(L-R): The Honourable Ed Holder, London West MP, Minister of State (Science and Technology); Horia Hangan, Western Engineering Professor and WindEEE Director; Joe Preston, Elgin-Middlesex-London MP; Susan Truppe, London North Centre MP; The Right Honourable Stephen Harper, PC, MP, Prime Minister of Canada and Amit Chakma, Western University President

“As a research-intensive university, Western is working deliberately to create world-class facilities and developing new partnerships in support of excellence. The Collider is another step toward achieving our vision, bringing researchers and industry together under one roof to make new discoveries and bring innovative products to world markets.”

**Gitta Kulczycki, Western University Vice-President
(Resources and Operations)**



WESTERN ADVANCED MANUFACTURING PARK

(L-R): Horia Hangan, Western Engineering Professor and WindEEE Director; Amit Chakma, Western University President; and The Right Honourable Stephen Harper, PC, MP, Prime Minister of Canada

The Honourable Gary Goodyear, Minister of State (Federal Economic Development Agency for Southern Ontario)

“The Collider represents a huge step forward for research and innovation in Canada. It is a bridge between research and industry, uncovering the next generation of discoveries.”

John Capone, Western University Vice-President (Research)

“What we have here is an opportunity you will not find anywhere else in North America. FedDev Ontario’s investment in this project is supporting the manufacturing industry – an important contributor to southern Ontario’s economic growth. (This) is a great example of how our government is backing our advanced manufacturers to bring new opportunities to the London area, and establish it as a hub for this sector.”

Hon. Gary Goodyear, Minister of State (Federal Economic Development Agency for Southern Ontario)

Western Sarnia-Lambton Research Park



In what has to be considered one of the most impressive turnarounds at a university-linked incubator anywhere in North America, the Sarnia-Lambton Research Park is now one of the crown jewels in the region's economy, boasting a 90-percent occupancy and serving as home to 28 transforming companies and over 1,000 knowledge-based employees.

Much credit goes to the community's civic leadership who stayed with the plan and remained fully committed to the realization of its goals. The Park Board and operating team also deserve a great deal of credit having engineered this turnaround in such a short time. However, the biggest accolades belong to the tenants themselves, who are continuing to step forward in increasing numbers and taking ownership of the transformation and enrichment of the region's economy. The entire Western Sarnia-Lambton Research Park team is extremely proud of the companies and employees that now consider the Park their home and are pleased to share their success stories as these companies begin to realize their own goals.



Western Sarnia-Lambton Research Park Board of Directors and Advisory Board (L-R): Back: Peter Hungerford, John Innes, Tom Strifler, Leo Stathakis (Outgoing Member), Ian Veen, Mike Bradley; (L-R): Front: Ron Van Horne, Judith Morris, Bev MacDougall, Gitta Kulczycki Absent: Jane Keast, Fabrice Orecchioni, George Mallay





Park Team (L-R): Back: Aung Oo, Tom White, Doug Rose, Katherine Albion, Tom Strifler; Front: Caroline Craig

CUBEIT

When projects involving technology, and especially those involving computer coding begin to take shape, there's often a need for space and an opportunity for members of a team to work alongside one another.

So it is with CubelT, a collaborative spin-off of an entrepreneurial incubator at Lambton College that is now linked with the Western Sarnia-Lambton Research Park.

As Len Payne, a Professor in Computer Programming and Information Technology, explains, having a lab-like co-working environment where students can collaborate fills a gap in the way software projects typically come together in a real-life digital economy.

"Typically there are really only two spaces available to students – their homes and the classroom," said Payne. "The space we have at the Research Park is a fundamental need that is now being met."

In that space (which is filled with highly flexible "pod-like" workstations and a table that encourages face-to-face discussions about collaborative projects), ideas may turn into the next big idea or may meet a specific need brought to the CubelT team by a Research Park client.

CubelT (L-R): Back: Len Payne, Jeff Codling; Front: Dylan Huculak, Jasmyn Newton, Steven Lambe

There are opportunities that are popping up all the time, and being here is a great place to take advantage of ideas that we might not otherwise hear about.



That could, quite conceivably, even turn a CubelT participant into a Research Park tenant.

"When our students take on a research project, it's entirely possible they will eventually need the space to grow the business," said Payne. "Why not move across the hall?"

Payne is one of the first to acknowledge that while the skills developed by his students are in demand, local opportunities for work once they graduate may not be.

"That's why we want to work here at the Research Park," he said. "There are opportunities that are popping up all the time, and being here is a great place to take advantage of ideas that we might not otherwise hear about."

The "purpose-built" collaborative process with CubelT and the Research Park is one that has captured the attention of a number of tenants.

"We've already started hearing from people here who see the potential and we are having some discussions," said Payne. "Where it will lead is something that is exciting in a very real sense."



Improving the quality, sourcing of materials and providing new value-added products is all part of the work we hope to do here at the Research Park.

Western Phytoceutics (L-R):
Brendan Walshe-Roussel, Sijun Zhou,
Nandana Ranatunga, Ed Lui, Binh Tran

WESTERN PHYTOCEUTICA

One of the potential breakthrough technologies in the growing field of bio-medical research may have its origins in traditional treatments dating back thousands of years.

The twist is the evidence-based research employed by Dr. Edmund Lui, Founder of Western Phytoceutics Inc., a tenant in the Western Sarnia-Lambton Research Park.

Dr. Lui's extensive background in both modern pharmacology (he is an Associate Professor in Western University's Department of Physiology and Pharmacology) and traditional Chinese medicine is at the root of the work being done by Western Phytoceutics.

Essentially, Dr. Lui is working on ways to standardize agricultural technologies used to grow and process plants such as American Ginseng.

"There is a significant opportunity when it comes to commercializing what we already know about the benefits of ginseng," said Dr. Lui. "At the same time, modern research is able to provide the standards necessary to produce ginseng in ways that will be accepted by modern practitioners."

The research underway by Western Phytoceutics at the Western Sarnia-Lambton Research Park is key to that next step.

Dr. Lui is eyeing techniques such as hydroponics as he and his team gather data that will lead to the next steps in the commercialization process.

"Standardization and advanced techniques for the production of ginseng are part of that commercialization process," he said. "Our lab and pilot plant at the Research Park offer us the important facilities we need to make this work possible."

Dr. Lui's work to bring the centuries-old knowledge around the benefits of ginseng to market is part of a process he believes will ultimately enjoy commercial success.

Connections with government officials (Dr. Lui is a member of the Expert Advisory Committee on Complementary Medicine of the Therapeutic Products Program at Health Canada) are integral to the work Western Phytoceutics hopes to do.

"We've assembled a multidisciplinary group to tackle some of these issues," said Dr. Lui, who estimates the market represents more than \$100 million annually, in Ontario alone.

"Improving the quality, sourcing of materials and providing new value-added products is all part of the work we hope to do here at the Research Park."



WESTERN SARNIA-LAMBTON RESEARCH PARK AND LAMBTON COLLEGE COLLABORATIONS

When it comes to the collaborations that exist between Lambton College and the Western Sarnia-Lambton Research Park, representatives of both groups say they're just getting started.

Dr. Katherine Albion, whose work as Director of the Bowman Centre for Commercialization (an integral part of the Research Park) includes interfacing with Lambton College, says location is only part of what makes the collaboration work.

"The relationship we have is quite a powerful one," says Dr. Albion. "The fact that we're just across the street from each other is certainly a factor, although it's much more than that."

Much of what makes the collaboration between Lambton College and the Western Sarnia-Lambton Research Park so successful is the opportunity for tenants to seamlessly integrate with the mission of one of Ontario's largest community colleges.

Dr. Mehdi Sheikhzadeh, Dean of Applied Research and Innovation at Lambton College, agrees.

"Our great strength is assisting with projects that are very close to commercialization" he said.

"Our level of applied research is precisely what Research Park tenants are looking for and we're happy to be a resource when it comes to helping them."

Dr. Albion, who works closely on those ongoing collaborative efforts, says the Research Park has facilities that tenants see as essential to their commercialization efforts.

Indeed, Lambton College has already seen at least three tangible examples of the collaboration efforts take shape, including the Bluewater Technology Access Centre, the Lambton Water Centre, and the Bio-Industrial Process Research Centre, all with facilities at the Research Park.

"We continue to see the power that comes from being conveniently located near our partners," said Dr. Albion. "Our tenants continue to benefit from the synergies that derive from our growing relationship with Lambton College."



WESTERN RESEARCH PARKS

Performance

94
Number of transforming entities

1581
Number of knowledge-based employees

\$110 million
Estimated annual contribution to the community

22nd
University Business Incubator Index Global Ranking

7th
University Business Incubator Index North American Ranking

56
Early Stage Tenants

11
Anchor Tenants

14
International Tenants

WESTERN DISCOVERY PARK WESTERN ADVANCED MANUFACTURING PARK

Team

Paul Paolatto – Executive Director

Julia Hoare – Director, Finance & Administration

Jennifer Dawe – Director, Client Services

Terry King – Facilities Manager

Board of Directors

Gitta Kulczycki (Co-Chair), Western University

John Capone (Co-Chair), Western University

Chirag Shah, PwC

Lynn Logan, Western University

Hanny Hassan, Alef Consulting Inc.

Rick Campbell (Advisor), Western University

WESTERN SARNIA-LAMBTON RESEARCH PARK

Team

Tom Strifler – Executive Director

Katherine Albion – Director, Bowman Centre

Aung Oo – Director, Consulting & Strategic Studies

Caroline Craig – Client Relations Coordinator –
Administrative Receptionist

Doug Rose – Facilities Manager

Tom White – Facility Services

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Warden Bev MacDougall, County of Lambton

Deputy Warden Ian Veen, County of Lambton

Judith Morris (Vice Chair), Lambton College

Gitta Kulczycki, Western University

Jane Keast, Suncor Energy, St. Clair Ethanol Plant

Fabrice Orecchioni, BioAmber

Ron Van Horne (Advisor), County of Lambton

John Innes (Advisor), County of Lambton

Peter Hungerford (Advisor), City of Sarnia

George Mallay (Advisor), Sarnia-Lambton Economic Partnership

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