NBIF

NEW BRUNSWICK INNOVATION FOUNDATION

ANNUAL REPORT 2014-2015

MAKING BIG WAVES OF INNOVATION.

THE COURSE THAT AN INNOVATION TAKES FROM CONCEPT TO COMMERCIALIZATION IS DYNAMIC.

AFTER 13 YEARS IN BUSINESS, WE'VE DISCOVERED THAT INNOVATION IS MORE THAN ACTIVITY. IT'S A FORMULA THAT COMES TOGETHER TO PRODUCE ONE GIANT ECOSYSTEM OF INNOVATORS.

EACH OF THE INVESTMENTS WE MAKE IN COMPANIES AND RESEARCH WORKS LIKE A DROP IN THE OCEAN OF OPPORTUNITY. RIPPLING OUT, CIRCLE BY CIRCLE, SOME OF THE WAVES THEY CREATE INTERSECT AND COLLIDE FORMING OTHER NEW, INCREMENTAL OPPORTUNITIES FOR NEW BRUNSWICK.

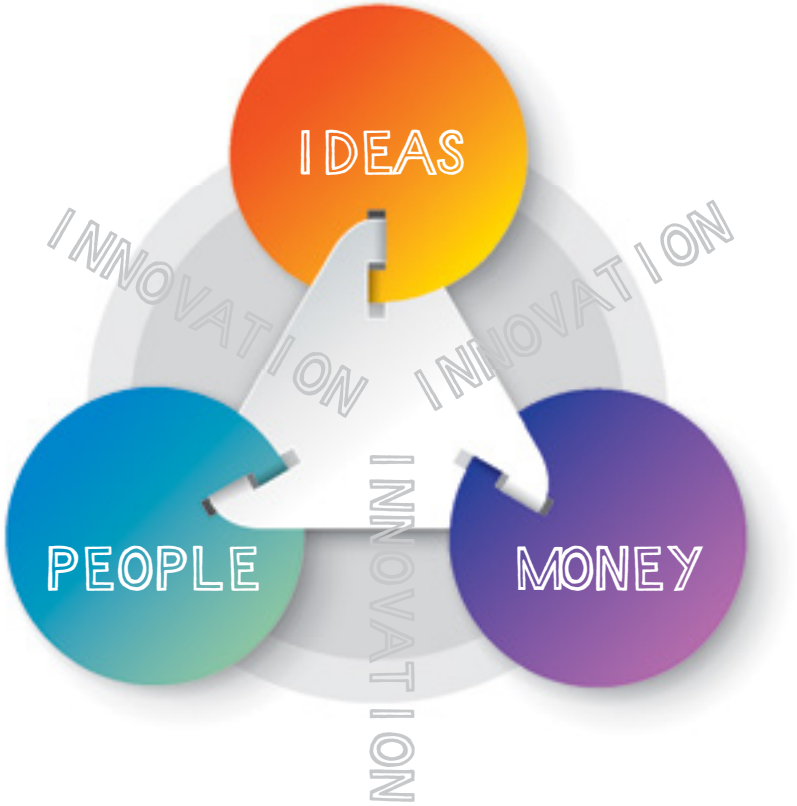
THIS IS HOW AN INNOVATION-BASED ECONOMY IS BUILT.

IDEAS, PEOPLE & MONEY.

These are the three basic ingredients of true innovation. It is where these three things intersect that innovation emerges, and you need all three to be successful.

Ideas for improving what already exists, or for something entirely new are plentiful. Developing and implementing them requires people and access to the resources they need to see it through such as money, equipment and mentors.

When you have all of these ingredients, and in proper proportions, you get the kind of innovation that generates value and wealth that can significantly impact an organization, its staff, the economy and ultimately, society.



ONE OF NBIF'S ROLES IS TO ACT AS A CAPITAL MARKET CATALYST. WE DO THIS BY PREPARING OUR STARTUPS FOR OTHER VENTURE CAPITAL FIRMS AND INVESTORS.

WE DO THE SAME FOR OUR APPLIED RESEARCH DIVISION BY LEVERAGING CONTRIBUTIONS BY INDUSTRY COLLABORATORS AND FROM NATIONAL GRANTING AGENCIES.

CREATING NEW ENTERPRISES

NBIF supports the creation and development of new ventures by offering equity capital, professional support, and networking opportunities to entrepreneurs that focus on innovation.

FUNDING APPLIED RESEARCH

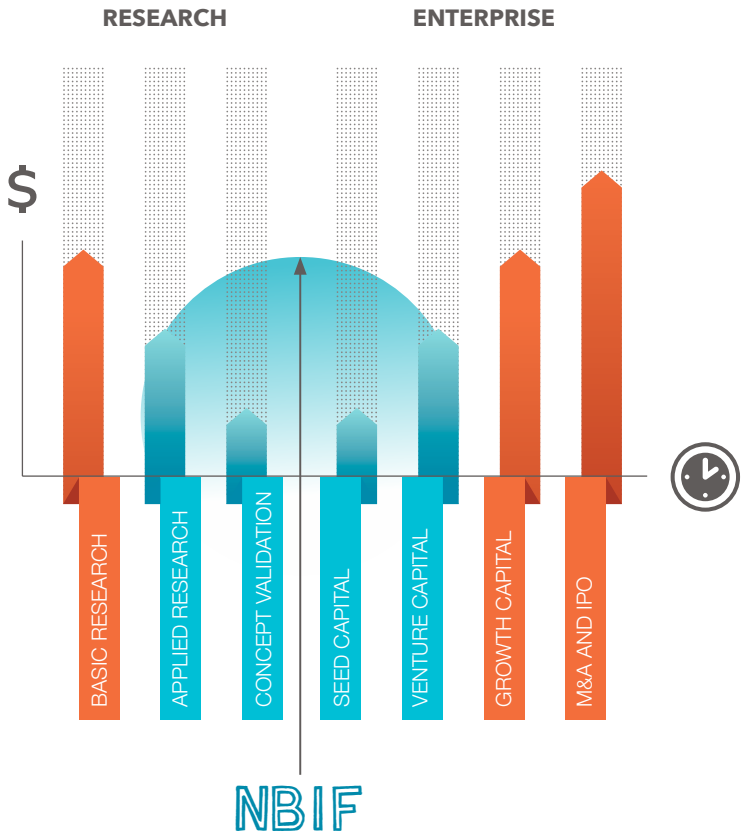
NBIF supports applied research by funding projects that show potential for commercialization and economic impact on the province, its universities, community colleges and research organizations.

BRIDGING RESEARCH & ENTERPRISE.

There are a number of capital sources available for innovators, and accessing them depends on where their innovation is along the timeline from concept to market.

Basic research generates new ideas, principles and theories that are essential for modern progress, but may not be immediately utilized. Applied research is the practical application of basic research for a specific business or client purpose.

On the research side of our business, we invest in activities like concept validation, prototype creation, and bench testing. On the enterprise side, we work to get R&D into the hands of entrepreneurs, and make investments in new startup companies.



BUILDING TALENT

NBIF supports the recruitment and development of outstanding researchers and entrepreneurial leaders by providing them with the funding, expertise and recognition they need to succeed.

LEVERAGING R&D FUNDING

NBIF works to increase the total infusion of research funding by investing in projects that unlock contributions from industry and national agencies, like the Canada Foundation for Innovation, NSERC, CIHR, NRC and more.

GROWING CAPITAL MARKETS

NBIF works to grow the province's capital markets by attracting investments from other capital and industrial partners, both inside and outside of New Brunswick and Canada.

TARGETING INDUSTRIES

To be eligible, all projects and business proposals must fit within one of our strategic industries, namely ICT, Energy & Environment, Biosciences, Value-added food & wood, Advanced Fabrication, and Aerospace.

CHAIR's MESSAGE
CATHY SIMPSON

On behalf of my fellow board members, I am pleased to present the New Brunswick Innovation Foundation's Annual Report. Over the past year, NBIF has continued to expand its reach and support for New Brunswick researchers, innovators and entrepreneurs. Each of us share a belief that as long as we live and work in New Brunswick, we have a responsibility to make it better.

It is why NBIF is about more than just awarding funding to worthy initiatives; our staff takes the time to work with our clients, to help move them forward, either towards the commercialization of their leading research or in the acceleration of their businesses. In fact, an independent study by Deloitte shows that every $1.00 NBIF invest generates $7.00 more from other capital sources, $7.90 in provincial GDP and $2.60 in income taxes. Altogether, NBIF's investments, financial leveraging, its portfolio's revenues and exits have contributed more than $1 billion to the New Brunswick economy. We want more!

We are partners in the New Brunswick innovation ecosystem and as we're now beyond our own start-up phase, we are pushing ourselves to do more to assist innovative thinkers and passionate entrepreneurs to succeed. What a thrill it is to see success in our portfolio companies as we watch them grow and scale up.

But there is more. We are placing greater emphasis on fostering R&D investment within existing New Brunswick companies by providing them with the funding opportunities they need to access and collaborate with our network of scientists and researchers.

Ultimately, our goal is for New Brunswick to be a global centre for innovation, and leaders in research and business collaboration by attracting the required talent, building the ideas and securing capital that strengthens our thriving ecosystem.

Together with the board of directors and management team, we look forward to realizing these goals and building an innovation based economy. It's hard work and our future depends on it.

OUR BOARD OF DIRECTORS


MIKE JENNINGS
VICE CHAIR
PRIVATE SECTOR


GERRY VERNER
SECRETARY
PRIVATE SECTOR


ANNETTE COMEAU
DIRECTOR
PRIVATE SECTOR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TREASURER
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JILL GREEN
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BYRON JAMES
DIRECTOR
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TOM MANN
DIRECTOR
PUBLIC SECTOR


ROB MILLER
DIRECTOR
PRIVATE SECTOR


BETH WEBSTER
DIRECTOR
PRIVATE SECTOR

AS AN INDEPENDENT, NOT-FOR-PROFIT CORPORATION, OUR SUCCESS COMES FROM THE ABILITY TO SYNDICATE OUR INVESTMENTS WITH BOTH THE PRIVATE AND PUBLIC SECTORS.

OUR BOARD COMPOSITION IS DESIGNED TO PROVIDE THE OVERSIGHT AND INSIGHT NEEDED TO COVER THE FULL SPECTRUM OF NBIF'S MANDATE.

NBIF PERFORMANCE
AT A GLANCE
SINCE 2003

CATEGORIES	AMOUNT
Capital under management	$ 120 MILLION
Invested by NBIF	$ 62 MILLION
Leveraged capital	$348 MILLION
Active portfolio companies	38
Research projects supported	400
Professors recruited	54
Technicians and assistants supported	1,308
Value of venture capital (VC) exits to date	$ 11 MILLION
Percent return on invested capital	+ 60%

CEO's MESSAGE

CALVIN MILBURY

Today, more than ever we are seeing increasingly more researchers and entrepreneurs who are thinking big and globally from day one. This mindset represents a marked shift. A culture of innovation has evolved, and it is having a tremendous impact on our province – and we at NBIF are witnessing that first-hand.

To fuel this culture shift, NBIF has invested more capital than ever before. Over the past three years, NBIF has increased its investments by 134 percent. In the fiscal year 2014-15, we invested a record $12.4 million as detailed in the table below. These investments also unlocked an additional $32 million in capital from other sources, denoting NBIF's role as a catalyst for innovation.

Our investments in high-potential growth companies in New Brunswick reached a new level last year with $4.2 million invested in 21 deals. NBIF was recognized by the Canadian Venture Capital Association as one of the top three most active VC funds in Canada. This is a testament to the talented entrepreneurs whom we are so privileged to work with in New Brunswick.

We are also connecting many small and medium sized businesses to our research community, introducing them to the talent, equipment and infrastructure that NBIF has helped to develop in New Brunswick over the past decade. These businesses are learning first-hand the benefits of partnering with researchers to undertake research and development. Last year 17 companies were awarded vouchers, and this coming year we expect to leverage the seven newly established NB Innovation Research Chairs to carry out even more business-led research and development across the province.

It's encouraging to see the pieces of the puzzle come together, and with that comes opportunity to do more, raise the bar, and capitalize on the ripple effect our investments create. I am confident now more than ever that NBIF is positioned to accelerate innovation and economic growth in New Brunswick.

Innovation is making big waves in New Brunswick!

OUR MANAGEMENT TEAM

JOANNE JOHNSON
DIRECTOR
ADMIN

CHET WESLEY, MBA
DIRECTOR
MARKETING

CRAIG MCLAUGHLIN, CPA, CA
CONTROLLER

LINDSAY BOWMAN, LLB
DIRECTOR
RESEARCH

JOE ALLEN, CPA, CA
DIRECTOR
INVESTMENTS

RAY FITZPATRICK, CPA, CMA
INVESTMENT ANALYST

ANDRÉ PELLETIER, MSC
RESEARCH DEV.
OFFICER

CARLA SAUL
ADMIN ASSISTANT

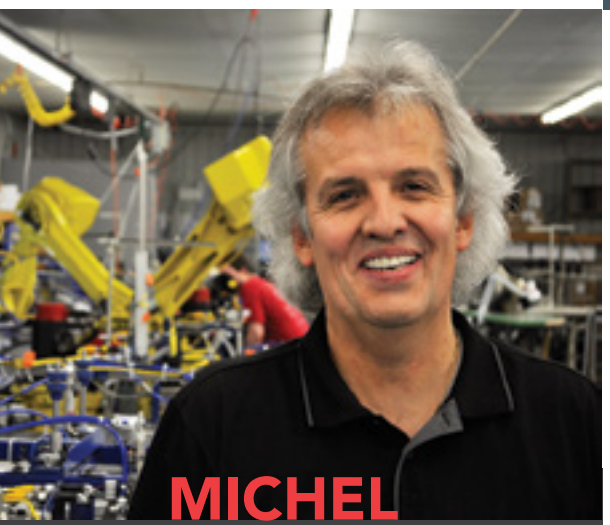
INVESTMENT ACTIVITIES

ALL FUNDS 2014-2015

ACTIVITY	2014-2015	2013-2014	PERCENT Δ	SINCE 2003
Applied Research	$ 3,823,575	$ 3,922,578	- 3 %	$ 24,474,355
Startups & Growth Companies	5,248,028	3,364,110	+ 56 %	20,131,384
Talent & Recruitment	3,353,948	1,135,000	+ 196 %	17,217,467
NBIF INVESTMENT	**$ 12,425,551**	**$ 8,421,688**	**+ 48 %**	**$ 61,823,206**
LEVERAGED FUNDS	32,176,040	43,196,045	- 26 %	347,587,408
TOTAL IMPACT	**$ 44,601,591**	**$ 51,617,733**	**- 14 %**	**$ 409,410,614**

17 SMEs FROM ACROSS THE PROVINCE USED OUR INNOVATION VOUCHER TO CREATE NEW PRODUCTS AND TECHNOLOGY.

MORE ESTABLISHED COMPANIES ARE USING INNOVATION FOR GROWTH.



MICHEL ST-AMAND,

founder of garment maker Confection 4e Dimension has been in business for 15 years. He and his engineers have developed many innovations for automating the sewing process.

Now he's thinking about launching a spin-off to license his innovations to other companies that sew, outside the garment industry of course, who face the same challenges.

CONFECTION 4E DIMENSION IN ST. LÉONARD MAKES HUNDREDS OF THOUSANDS OF PAIRS OF UNIFORM PANTS EVERY YEAR.

SEWING THE ELASTIC WAISTBAND IS TRICKY AND HAS TO BE DONE MANUALLY, SLOWING PRODUCTION AND CAPACITY.

USING OUR INNOVATION VOUCHER, THE COMPANY HIRED CCNB IN BATHURST TO DEVELOP A ROBOTIC SOLUTION THAT REDUCED COSTS BY 95%.

2014-2015

INNOVATION VOUCHER FUND

Our Innovation Voucher allows New Brunswick SMEs to access up to $80,000 to cover 80% of the cost of R&D services by a publicly-funded research organization.

COMPANY	RESEARCH ORG	PRODUCT/TECH	INVESTMENT
Los Cabos Drumsticks	CCNB	Automated drumstick sorter	$80,000
C-Therm Technologies	RPC	Thermal sensor improvement	80,000
Jiffy Products	CZRI	Hydroponic peat moss system	80,000
Force 3 Innovations	UM	Advanced truck driver seating	80,000
Mycodev	CCNB	Process optimization for chitosan	80,000
NATECH Environmental	RPC	New wastewater treatment system	79,999
AquaVet Services Intl.	RPC	Sea lice fighting food additive	79,998
Les Industries Corriveau	CCNB	Automating a malting process	79,994
Rubreco Inc	RPC	Devulcanization process for rubber	79,914
L2 Aquacole	CCNB	Method for treating oyster pockets	76,152
Superior Tanks	CCNB	New production line implement	53,056
Peninsula Foods	CCNB	Blueberry field sanitation mower	51,620
Missing Link Technologies	UM	Robotic inventory management	48,000
Island Fishermen's Coop	CZRI	Certification process for fish	27,255
DJ Smearer	UNB	Development of a wooden tile	23,040
Barrel Enterprises	UNB	New sauna technology	23,000
ChemGreen Innovation	MTA	Antimicrobial non-toxic plastic	16,000

NBIF INVESTMENT	**$1,038,028**
SME CONTRIBUTION	259,507
TOTAL IMPACT	**$1,297,535**

CCNB - Collège communautaire du N.-B. **CZRI** - Coastal Zones Research Institute. **MTA** - Mount Allison University.
RPC - Research Productivity Council. **UM** - Université de Moncton. **UNB** - University of New Brunswick.

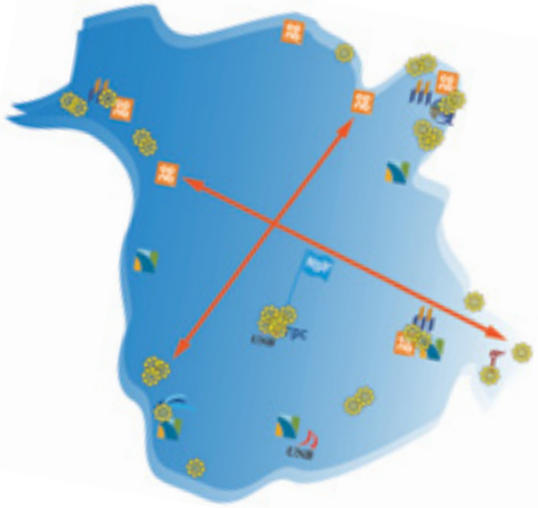
WHAT WE LEARNED.

One thing we have learned since creating the Innovation Voucher is that most companies already have ideas for new or better products, processes or technology. At first, we thought that N.B. companies weren't doing R&D because they did not have the laboratories or experts needed to see it through.

This is only partly true. After completing our first 30 vouchers, we have learned that it is just as much a lack of knowledge about who can do what and where. This re-asserted our belief that in order to take action on innovation, people need to know that it's possible.

The more that companies and research institutions collaborate, the greater their ability will be to improve the economy through innovation.

Companies in New Brunswick are now collaborating with researchers from every corner of the province. From St. Stephen to Bathurst, to Sackville and Edmundston.



WE CONNECTED 17 BUSINESSES AND RESEARCHERS FROM ALL OVER NEW BRUNSWICK TO DEVELOP NEW INNOVATIONS.

PEOPLE WHO LIVE IN CITIES TAKE WASTEWATER TREATMENT FOR GRANTED. IF YOU LIVE IN THE COUNTRY YOU NEED AN UNDERGROUND SEPTIC FIELD BUILT TO ENVIRONMENTAL SPECIFICATIONS.

EASIER SAID THAN DONE, BECAUSE NOT ALL UNDERGROUNDS ARE THE SAME. SOME ARE TOO SANDY, OTHERS HAVE TOO MUCH CLAY, BUMPING UP THE PRICE.

WITH AN INNOVATION VOUCHER, NATECH ENVIRONMENTAL SERVICES IS WORKING WITH RPC TO TEST A MANUFACTURED MATERIAL THAT WILL STANDARDIZE AND STABILIZE THE COST OF SEPTIC SYSTEMS.

AT $750K, BREAKTHRU IS CANADA'S LARGEST STARTUP COMPETITION.

THE 2015 BREAKTHRU STARTUP COMPETITION HAD THE HIGHEST PARTICIPATION RATE SINCE IT BEGAN IN 2007.

2014-2015 Breakthru was our biggest yet. After a six-month process ending with Breakthru LIVE in March, three dreamers became entrepreneurs overnight. At the event, hosted by CBC's Harry Forestell and Radio-Canada's Karine Godin, each of the five finalists pitched live on stage before an audience of 540. With a live band, video and lights galore, the excitement in the room peaked from start to finish as business people from across the province stood in ovation. To date, Breakthru has created 12 companies.

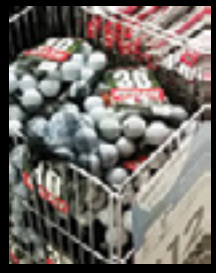
BREAKTHRU 2015 STATS.

Entries	62
Participants	118
Sponsors	20
Mainstream media stories	21
Twitter impressions (5-day voting)	84,000
Twitter engagements (5-day voting)	32,000
Audience created tweets	4,138
Attended BREAKTHRU LIVE	540

JOSH OGDEN won the grand prize for his team's golf ball retreival system for water hazards. Until Castaway invented its automated technology, scuba divers had to be hired, which is expensive and dangerous, especially where there are alligators and snakes and...

THE BREAKTHRU PROCESS.

- MAKE A VIDEO PITCH
- FILL OUT THE APP FORM
- ATTEND BOOT CAMP
- SUBMIT BUSINESS PLAN



UPDATE. Since winning the grand prize, the company's founder, Matt Vance, returned to New Brunswick to live and work for the company after accepting a job in Toronto. Almost immediately after Breakthru, the company inked a deal with two major Canadian retailers. This was just the start for Castaway. They are now gaining traction in the United States and expect to be operational there before the end of 2015.

KEELEN GAGNON led SimpTek to win first runner-up for their energy management software. They can detect appliances in your home and show you, in real time, how much energy each is using and the cost. Set a budget and it will keep you on track.

KEITH BRUNT took second runner-up for NaquaPure, which removes heavy metals from industrial wastewater. Big industry spends big money to deal with this problem. With NaquaPure, companies can dispose of heavy metals at a far lesser cost.

BECOME 1 OF 5 FINALISTS

APPEAR ON TV NEWS

PITCH TO SELECTION COMMITTEE

PITCH AT BREAKTHRU LIVE

WIN

GRAND PRIZE
$287,250

1ST RUNNER UP
$222,250

2ND RUNNER UP
$222,250

INCORPORATE, SET UP BOARD, GET STARTED, ACCELERATE, RAISE MORE VC, SCALE UP, GROW.

UPDATE. SimpTek went to Toronto to appear on the 2015-2016 season of CBC's Dragons' Den. They're now working with utilities to provide their software directly to consumers. Utility companies want people to reduce power usage during peak hours and require big data analytics about usage. Watch CBC's Dragons' Den this Fall to see how Keelen and Asif Hasan fared with the dragons.

UPDATE. NB Biomatrix is now incorporated and getting ready to go to market in the winter of 2016. Since every factory and process is different, they are working on determining all of the specifications needed to instruct customers how much NaquaPure they'll need to employ based on metal concentration and volume of water. After this bench testing is complete, the product will be ready for full scale commercialization.

SEVEN NEW COMPANIES GOT OFF THE GROUND THIS YEAR WITH $600,000 FROM OUR STARTUP INVESTMENT FUND.

WE HELP STARTUP COMPANIES SCALE-UP AND GROW.

PHILIP CURLEY, founder of HotSpot Merchant Solutions, sells a mobile platform that allows consumers to pay for metered parking, and provides retailers with location-based marketing tools.

After setting up his system for four municipalities, he caught the eye of Passport Parking, a large U.S.-based pay-by-phone parking company.

The main attraction is the advanced features of HotSpot. They are now working together to bring HotSpot into the U.S.

IN 2015, QIMPLE, LED BY YVES BOUDREAU, WAS SELECTED FOR THE 500 STARTUPS ACCELERATOR IN SAN FRANCISCO.

QIMPLE'S 14-WEEK STAY IN SAN FRAN GAVE THEM ACCESS TO THE BRIGHTEST LEADERS AND DEVELOPERS IN THE WORLD.

QIMPLE MAKES FINDING AND HIRING PEOPLE SIMPLER. USING ONE DASHBOARD, HR PROS CAN POST AND TRACK JOB VACANCIES ON ALL ONLINE JOB SITES AT ONCE.

2014-2015

STARTUP INVESTMENT FUND

NEW COMPANIES

Our Startup Investment Fund provides up to $100,000 in equity capital to get the earliest companies off the ground. These are often pre-revenue, unincorporated companies. It's a one time decision under this fund. If the company meets specific milestones, they can obtain additional funding through our Venture Capital Fund.

COMPANY	PRODUCT	INVESTMENT
Timbre Cases	Tough, humidity-controlled guitar cases	$110,000
Castaway Golf	Underwater ball retrieval tech and resale	100,000
Fiddlehead Technologies	Advanced cost prediction software	100,000
ITAVIO	Parent control software for in-app purchases	100,000
Qimple	Advanced online HR recruitment software	100,000
NB Biomatrix	Removing heavy metals from wastewater	50,000
SimpTek Technologies	Smart meter energy control system for homes	50,000
NBIF INVESTMENT		**$610,000**

CHANGING OUR APPROACH.

NBIF added seven new companies to its Startup Investment Fund portfolio, now in its second year, bringing the total to 13. After two years of supporting these young, pre-revenue companies, we realized how important it is for us to lend our expertise. As a result, we are now dedicating more of our time to guiding these companies through the initial hardships of starting a business.

Providing extensive support to these young entrepreneurs is essential for helping them turn from a startup to a scale-up company. With our support and their hard work, our intention is to help position them for follow-on investments from our Venture Capital Fund and other private and institutional investors.

On any given day, you will now find all of our staff coming together to help with things like managing cash flow, structuring deals, giving communications and governance advice, refining their investor pitch and introducing them to other CEOs in our portfolio who have experienced similar problems and situations.

MAKING IT CONNECT.

SimpTek, the first runner-up of Breakthru 2015 is now incorporated and refining its energy management software for its first industrial customer.

With a huge market potential, SimpTek discovered an Australian company that perfectly fits their target. But they didn't know anything about doing business there.

So we got them working with Pablo Asiron, CEO of RtTech who already has more than a dozen customers there.

ONE OF THE BIGGEST PROBLEMS SERVICE TECHNICIANS FACE IS ACCESSING THE MOST UP-TO-DATE PRODUCT SPECIFICATIONS AND SOLUTIONS.

UNDER DANIELLA DEGRACE'S LEADERSHIP, GEMBA'S PRODUCT PROCEDURE FLOW DOES EXACTLY THAT, ALLOWING TECHNICIANS TO SOLVE PROBLEMS USING NEWEST INFORMATION.

TECHNICIANS CAN ALSO SHARE SOLUTIONS USING THE SAME DIGITAL SPACE, BUILDING A PRACTICAL REPOSITORY OF KNOWLEDGE.

OUR VENTURE CAPITAL INVESTMENTS HELPED CREATE FOUR NEW COMPANIES AND GROW EIGHT MORE.

OUR $4.2M INVESTMENT IN STARTUPS LEVERAGED $16M MORE FROM OTHER INVESTORS.

MELANIE FLANAGAN
is the CEO of Itavio, provider of Kinderguardian - a technology that allows parents to manage their childrens' gaming and in-app purchases.

First, parents can deposit an allowance, with limits, to remove their kids' constant asks for buying them things like the "berries" and "hearts" they want.

Second, the technology allows parents to be the timekeepers - determining when and how long they are allowed to play their games.

WHEN USED IN MEDICAL APPLICATIONS, THE CHEMICAL CHITOSAN CAN HELP STOP MASSIVE BLEEDING IN LESS THAN 20 SECONDS.

UNTIL MYCODEV DEVELOPED ITS PATENTED METHOD, CHITOSAN WAS MADE FROM SHELLFISH WHICH MADE IT UNSAFE IN HUMANS.

USING A NON-ANIMAL SOURCE, MYCODEV'S PRODUCT IS ON ITS WAY FOR USE IN HUMANS. THIS ONE'S GOING TO SAVE LIVES ALL OVER THE WORLD.

2014-2015
VENTURE CAPITAL FUND
NEW INVESTMENTS

Our Venture Capital Fund invests up to $1M in companies that are ready to launch and grow. Through our professional support, our goal is to help fuel that growth and attract more investors. When that happens, we will often increase our investment in the company too. Here are our new and follow-on investments for FY 2014-2015:

COMPANY	PRODUCT	INVESTMENT
RtTech Software	Real-time down time and energy use monitor	$ 500,000
MycoDev new	Human grade chitosan production	500,000
Gemba Software† new	Mobile customer service tech platform	500,000
Smartpods new	Automated moving desks and health analytics	500,000
Sentrant Security†	Internet fraud detection and mitigation	250,000
Resson Aerospace new	Smart agricultural drones and software	250,000
Eigen Innovations	Advanced optic sensors for manufacturing	150,000
Food Tender	Online bidding for food service suppliers	150,000
SceneSharp Technologies	Colour image sharpening for orbital cameras	150,000
Inversa Systems	Diagnostic imaging tech for industry	125,000
Atlantic Hydrogen	Removing solid carbon from natural gas	100,000
Enovex	Industrial gas separation tech for industry	50,000
NBIF INVESTMENT		**$3,225,000**

† Upon reaching specific milestones, Gemba Software and Sentrant Security are pre-approved for additional investments of $250,000 and $125,000 respectfully.

WHAT'S NEW.

NBIF outperformed its 2014-2015 target of 10 investments with a total of 12 under its Venture Capital Fund. Valued at $3.2 million, it is the highest investment level since inception. Together, our venture capital and startup investments allowed our companies to attract an additional $16 million from other capital providers.

The highlight of the year was the closing of a $3 million round of new venture capital from NBIF and private equity firm **McRock Capital.** This will help accelerate RtTech's phenomenal growth. Founded in 2011, the company's product is now installed at 59 sites in 14 countries around the world.

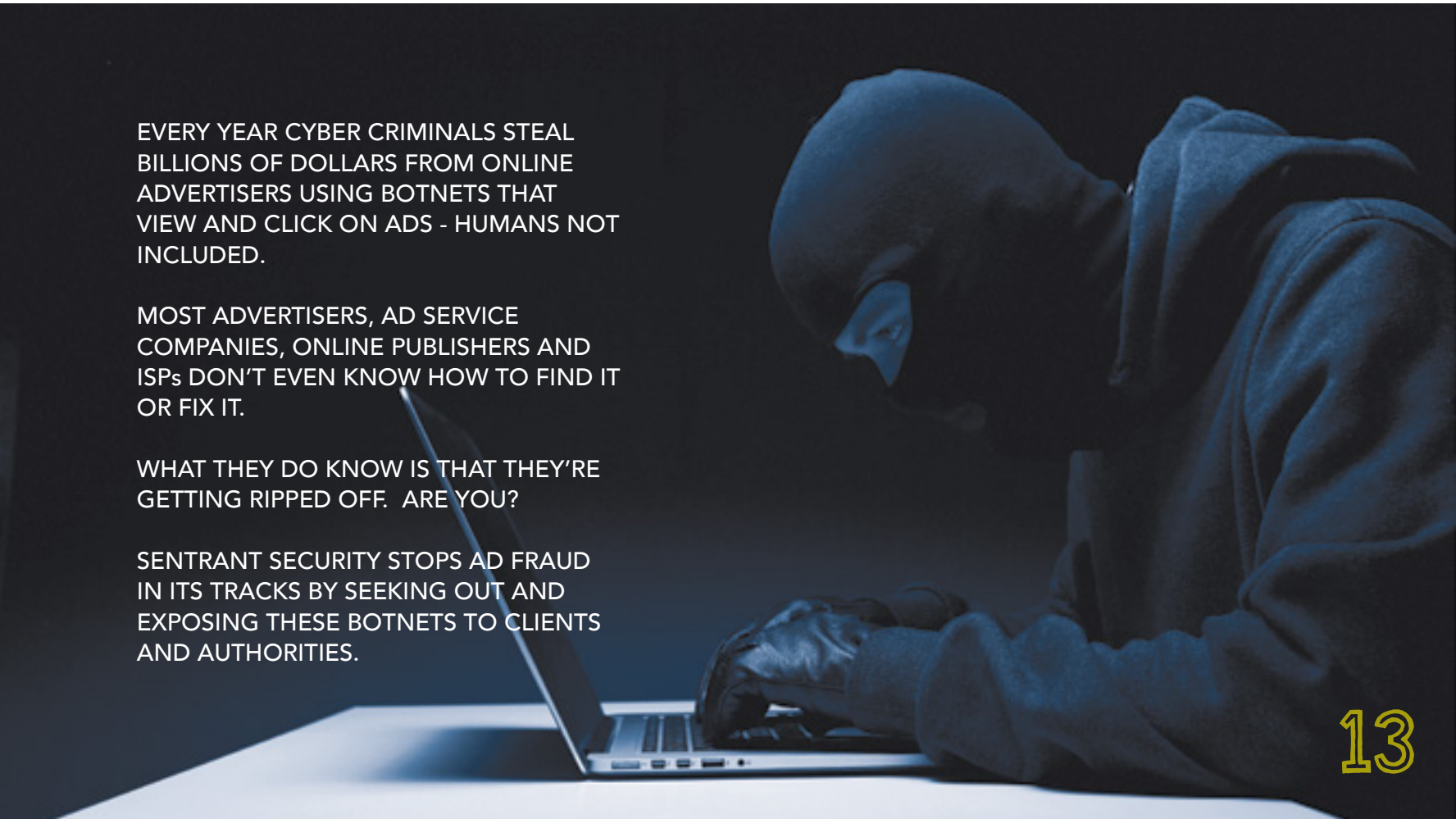
Our additional investment in sensor maker **Eigen Innovations**, borne from the research of NBIF-backed Professor Ricky Dubay, helped them make considerable headway since their 2014 launch. The company is already partnering with a number of companies in the deployment of its solution including Oregon-based **FLIR Systems Inc.** [**NASDAQ: FLIR**], the world's largest thermal camera and sensor maker.

HOW IT CONNECTS.

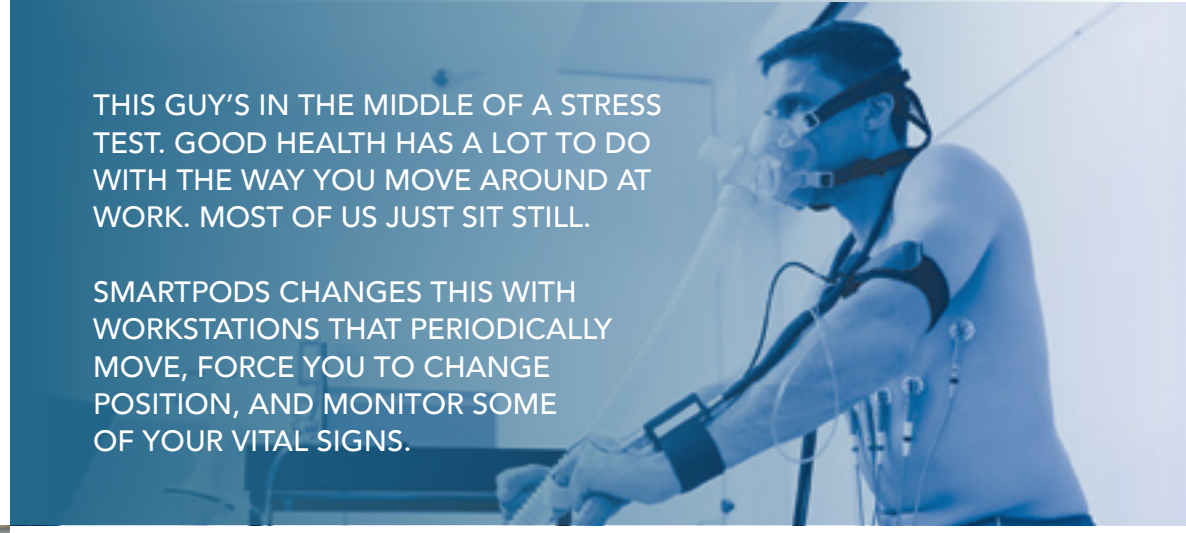
SceneSharp Technologies is a tech company borne from the research of Dr. Yun Zhang at UNB. An expert on creating high definition colour images from orbital satellites, he has developed algorithyms used by apps like **Google Earth.**

In 2009, students turned his technology into a business plan for Breakthru and won first place.

Since then, the students have moved on with their careers and its new CEO is now expanding the company in the United States.



76% OF OUR PORTFOLIO'S REVENUE COMES FROM EXPORTS.



THIS GUY'S IN THE MIDDLE OF A STRESS TEST. GOOD HEALTH HAS A LOT TO DO WITH THE WAY YOU MOVE AROUND AT WORK. MOST OF US JUST SIT STILL.

SMARTPODS CHANGES THIS WITH WORKSTATIONS THAT PERIODICALLY MOVE, FORCE YOU TO CHANGE POSITION, AND MONITOR SOME OF YOUR VITAL SIGNS.

LEON DESROCHES

is the founder of Smartpods. A physiotherapist, his work treating patients at the Sparx Wellness Institute sparked an idea that aims to reduce work-related musculoskeletal disorders.

Sitting for extended periods can be detrimental to both health and productivity. After conducting his own applied research, Desroches determined that his automated moving workstations improve employee health and productivity.

Research shows that employees who work at Smartpod stations can be more productive, suffer less fatigue and physical problems, leading to fewer sick days and insurance claims.

And you can't turn it off. Well, you can, but it goes into the standing position. Now there's a motivator!

2014-2015

INVESTMENT PORTFOLIO

COMPANY	PRODUCT	INVESTMENT
Atlantic Hydrogen	Removing solid carbon from natural gas	$1,100,000
RtTech Software	Real-time down time and energy use monitor	1,000,000
Inversa Systems	Diagnostic imaging tech for industry	650,000
Breviro Caviar	Land-based sturgeon aquaculture	550,000
Sentrant Security	Internet fraud detection and mitigation	500,000
Agora Mobile	Development tools for mobile apps	500,000
Encore Interactive	Live streaming technology for broadcasters	500,000
Gemba Software new	Mobile customer service tech platform	500,000
Mycodev new	Human grade chitosan production	500,000
Smartpods new	Automated moving desk and health monitor	500,000
Smart Skin Technologies	Touch sensitive electronic fabrics for industry	500,000
KnowCharge	Electro-conductive paper products	350,000
Xiplinx	Production worker productivity monitoring	350,000
Eigen Innovations new	National-level health information systems	271,000
Populus Global Solutions	Advanced optic sensors for manufacturing	250,000
Enovex	Industrial gas separation tech for industry	250,000
Food Tender	Online bidding for food service suppliers	250,000
Foursum	Mobile app for golf scoring and sharing	250,000
Introhive	Internal contact matchmaking for sales leads	250,000
Resson Aerospace new	Smart agricultural drones and software	250,000
SceneSharp Technologies	Colour image sharpening for orbital cameras	250,000
Geode Technologies	Mobile app for vehicle fleet tracking	200,000
CyberPsyc Software	Virtual reality software for treating phobias	200,000
R17 Solutions	Online transaction speed optimization	200,000
Select Bidder	B2B online auction service	200,000
Timbre Cases new	Tough, humidity-controlled guitar cases	110,000
Castaway Golf new	Underwater ball retrieval tech and resale	100,000
ChemGreen Innovations	Anti-microbial plastics for healthcare	100,000
Fiddlehead Technologies new	Advanced cost prediction software	100,000
HotSpot Merchant Solns	Parking payment app and marketing tools	100,000
ITAVIO new	Parent control software for in-app purchases	100,000
Spinzo	Dynamic pricing technology for online sales	100,000
Total Pave	Mobile app for road surface analysis	100,000
Qimple new	Advanced online HR recruitment software	100,000
Flixel Cinemagraph	Mobile and desktop pro cinemagraph tech	50,000
NB Biomatrix new	Removing heavy metals from wastewater	50,000
SimpTek Technologies new	Smart meter energy control system for homes	50,000
Legacy Lane Fibre Mill	Micro fibre milling process and operation	25,000
NBIF INVESTMENT		**$11,406,000**

DEVELOPING INNOVATION CULTURE.

WHAT LEADERS NEED TO KNOW AND DO AND DO AGAIN.

For a champion of innovation, the journey from concept to commercialization starts with a call to adventure, and it is when they decide to take action that the innovation continuum begins. Part of that decision comes from knowing whether or not they will have the resources necessary to make it happen.

Company leaders who possess innovation management skills know that a champion of innovation is a voluntary position. Innovation is not a task that you can assign or delegate and is something more likely to emerge off-the-cuff during meetings and conversations. To create a culture of innovation, leaders must possess the ability to recognize who are the innovation champions in their midst. When a solid idea comes forth, no matter how "out there" it seem to be, some time and resources must be given for innovation to play a role in your organization's success.

That is the investment you make. Whether it is a half a day a week or half the week itself, you have to give innovation champions the "space" they need to explore. For example, for those who present quality ideas, their regular workload needs to be modified in a way that allows them to dedicate some of their time and energy towards developing their idea. Despite anyone's "superiority of knowing" about what is a good or bad idea, innovation champions need to be able to study the feasibility of their idea and its impact on organizational goals.

Experimentation alone can reveal lucrative opportunities that you may otherwise never see from your point of view. If you dismiss people's ideas or fail to reward them for bringing them forth, even if you think they are going to fail, you could irreversibly damage your ability to use innovation to grow your business. It takes confidence and courage to bring innovative ideas forth and is possibly the solitary reason studies prove that 95% of people's most innovative ideas go no further than their desktop. As a leader, if you shoot down people's ideas, you risk shutting down their future idea sharing for good.

Expanding your company through innovation is a delicate operation that requires an environment of openness and positivity. Negative criticism of ideas is the death knell of innovation and is one of the most counter-productive things you can do as a leader. Innovative thinkers want to be recognized just for thinking about company problems and solutions.

Catch people doing things right and acknowledge it. Share problems with staff and find out who is the most enthusiastic about finding a solution. Collaborate some ideas and give them the resources and time they need to determine its feasibility and next steps. If you identify them as that idea's "champion" you are likely to find others come forth with other innovative ideas. Whether or not your staff's ideas are developed and put to use, your return will be a workforce more willing to share more of their unspoken ideas. Some of them will stick. Some of them will flop. Some could be big money makers or savers for a while. But despite the life of the innovation's usefulness, you will be left with is a lasting culture of innovation.

INNOVATION DEMANDS AN OPEN AND POSITIVE ENVIRONMENT.

WE INVEST IN APPLIED RESEARCH WITH A COMMERCIALIZATION COMPONENT THAT FOSTERS INDUSTRY PARTNERSHIPS.

OUR $7M IN RESEARCH FUNDING LEVERAGED $16M MORE FROM OTHER SOURCES.

MOVING ORGANIC WASTE TO A BIOFUEL REFINERY CAN BE COST AND CARBON PROHIBITIVE.

DR YING ZHENG'S PORTABLE MICRO REFINERY CAN BE USED AT THE SOURCE OF THE WASTE, LIKE THE FOREST OR FOOD PROCESSING PLANT.

WITH NEW EQUIPMENT, SHE WILL HELP INDUSTRIES PREPARE TO SWITCH FROM USING CRUDE TO FOOD.

TREVOR HANSON is a transportation engineer with extensive experience developing intelligent transportation systems and multimodal transportation strategies in Atlantic Canada.

An assistant professor at the University of New Brunswick, Dr. Hanson has a reputation for addressing and solving problems associated with transportation. He is also the recipient of the 2012 Association of Professional Engineers' Young Professional Achievement Award.

2014-2015

RESEARCH INNOVATION FUND

Our Research Innovation Fund has four main activities: start-up awards for new professors and researchers, emerging projects, concept validation and innovation capacity development.

RESEARCHER	ORG	TECH/EXPERTISE	INVESTMENT
CONCEPT VALIDATION			
Ying Zheng	UNB	On-site micro biorefinery for green fuels	$ 260,000
STARTUP AWARDS			
Mohsen Mohammadi	UNB	Models for the micromechanics of materials	75,000
François Chabot	CCNB	Extracting value from industrial wastewater	50,000
EMERGING PROJECTS			
Alain Doucet (4)	CCNB	Oyster washing tech, agri field burner + more	51,603
Trevor Hanson	UNB	Real-time hazardous goods monitoring on trains	25,000
Serge Gauvin	UM	Visualization of advanced unobservable lasers	25,000
Meng Gong	UNB	High strength cross laminated timber products	25,000
John Johnson	UNB	Novel drug sourcing from plant endophytes	25,000
Suzanne Currie	MTA	Impact of climate change on Miramichi Salmon	25,000
Douglas Campbell	MTA	Advanced tech for analyzing microbial growth	15,000
NBIF INVESTMENT			**$576,603**
LEVERAGED FUNDS			**1,161,029**
TOTAL IMPACT			**$1,737,632**

CCNB - Collège communautaire du N.-B. **CZRI** - Coastal Zones Research Institute. **MTA** - Mount Allison University. **RPC** - Research Productivity Council. **UM** - Université de Moncton. **UNB** - University of New Brunswick.

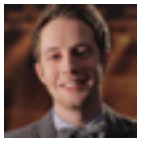
HOW IT EVOLVES.

In FY 2014-2015, NBIF awarded **Dr. Ying Zheng** of UNB $260,000 for the planning and development of a mobile bio-refinery, a novel concept in the world of biofuels. But the story doesn't start here. It was back in 2011 when NBIF provided her with $10,000 to answer whether New Brunswick has sufficient biomass for the sustainable development of renewable transportation fuels.

Then in 2012, after assessing the bioenergy potential in the province, Dr. Zheng and CCNB's **BioEnergy Technology Scale-up Centre** developed a collaborative project to develop further this emerging sector. Dr. Zheng received $25,000 to help develop a molecular sieve for producing fuel-grade ethanol, and for CCNB, $95,000 to determine the technical and economic feasibility of ethanol recovery.

Subsequently in 2014, Dr. Zheng was awarded a $2.5 million Canada Research Chair in Chemical Process and Catalysis plus $685,000 from the **Canada Foundation for Innovation** and NBIF for green fuel upgrading and characterization equipment. As a result, Dr. Zheng's innovations are ready to make their impact on industry.

HOW IT CONNECTS.



One of the data collection techniques that Dr. Hanson is using for his emerging project *(see image below)* was developed by our 2013 **Breakthru** Startup Competition's grand prizewinner **Coady Cameron** while he was undertaking his master's degree in engineering.

Total Pave is a smartphone application that detects, analyzes and maps road surface conditions using its built in GPS and altimeter technology. They continue to support Dr. Hanson's work.

AFTER SEVERAL DISASTERS HIT NORTH AMERICA'S AGING RAILWAY SYSTEM, SOME FATAL, DR TREVOR HANSON DECIDED TO TAKE ACTION.

THE BIGGEST RISK IS FOUND IN AREAS KNOWN AS "DARK TERRITORY" NOT MONITORED BY RAIL TRAFFIC CONTROL.

DR HANSON IS WORKING ON A NEW VIDEO-BASED DATA RECORDING AND ANALYSIS SYSTEM THAT COULD LEAD TO REAL TIME MONITORING OF HAZARDOUS GOODS MOVEMENTS BY RAIL.

OF THE 38 COMPANIES IN OUR VENTURE CAPITAL PORTFOLIO, 11 ARE BORNE FROM RESEARCH CONDUCTED IN NEW BRUNSWICK.

WE INVEST IN APPLIED RESEARCH THAT MAKES AN IMPACT.

FRANÇOIS CHABOT

was recruited by CCNB's Biotechnology Scale-up Centre in Grand Falls with start-up funding for his lab from NBIF.

As we increase our investment in innovation vouchers, he will work with industry on multiple types of biomass and bioenergy projects.

A microbiologist, he comes to us from INRS University in Québec where he was chief of operations in a lab that develops value-added products from wastewater.

ANALYZING THE TOXIC EFFECT OF CHEMICALS ON OUR MARINE AND FRESH WATER ECOSYSTEMS IS CRITICAL.

AFTER FISHERIES AND OCEANS CANADA SHUT ITS LAB IN ST. ANDREWS, THE REGION WAS LEFT WITHOUT THIS IMPORTANT CAPABILITY.

WITH NEW EQUIPMENT, THE HUNTSMAN MARINE SCIENCE CENTRE WILL CONTINUE THIS WORK FOR THE AQUACULTURE AND WILD FISHING INDUSTRIES.

2014-2015

INNOVATION CAPACITY DEVELOPMENT

Part of our Research Innovation Fund, our Innovation Capacity Development Initiative investments are geared towards expanding capacity through new infrastructure or supporting the preliminary work needed to build proposals for major federal funding.

RESEARCHER	RESEARCH ORG	PRODUCT/TECH	INVESTMENT
Ying Zheng	UNB	Equipment for green fuel characterization	$ 256,714
Christopher Bridger	HMSC	Infrastructure for enviro toxicology expansion	145,200
Richard Cunjak	UNB	Equipment for stable isotope fingerprinting	116,538
Howard Li	UNB	Drone for forest management and firefighting	98,271
Jeffrey Waller	MTA	Equipment for algal DMSP (antioxidant) research	98,022
Andrew Gerber	UNB	Instruments for high performance time simulation	92,087
Douglas Campbell	MTA	Lab for structural/function analysis of phytoplankton	81,662
André Dumas	CZRI	Genetic modification of Arctic Char for aquaculture	26,478
Mohamed Touaibia†	UM	Synthesis of fatty acid metabolism inhibitors	8,000
Habib Hamam†	UM	Data hiding and cryptography within optic signals	8,000
David Joly†	UM	Lab for study of virus transmission between plants	8,000
Juan Carretero†	UNB	Equipment for cable manipulated robotics research	8,000

NBIF INVESTMENT	**$946,972**
LEVERAGED FUNDS	**1,858,265**
TOTAL IMPACT	**$2,805,237**

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† These awards are to support proposal building for obtaining funding from federal granting agencies.

HOW IT CONNECTS.

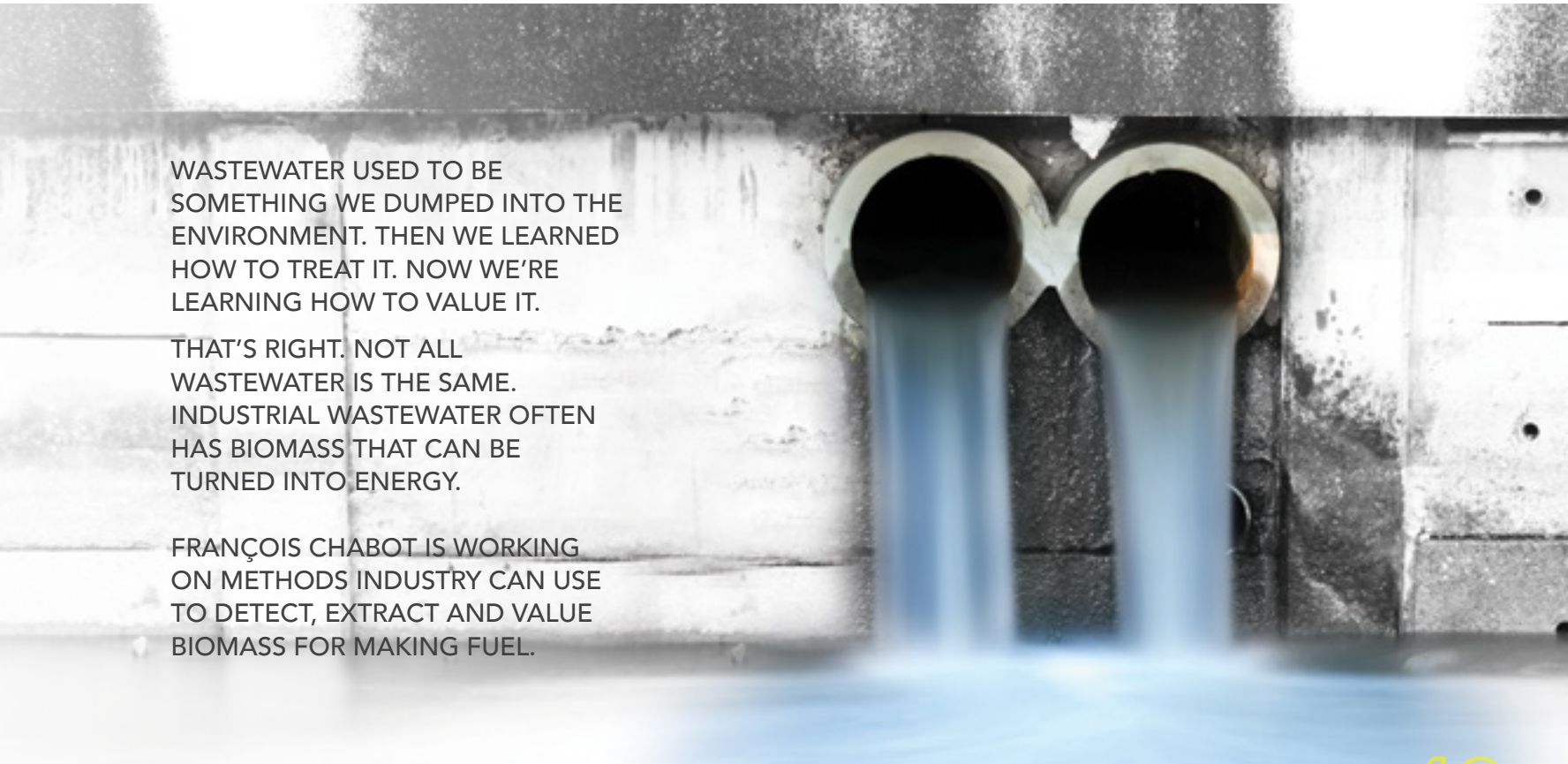
Increasing New Brunswick researchers' capacity to innovate by funding the equipment and infrastructure they need expands the same capacity for industry as well. For example, our investment in equipment for **Dr. Howard Li's** development of flight drones for forest management has the potential to serve a number of players in our innovation ecosystem including:

- Our portfolio company **Resson Aerospace**, makers of flight drones and software technology for the agriculture industry.
- Private company **Leading Edge Geomatics**, who perform aerial geological and geographical surveys and are currently conducting R&D using our Innovation Voucher.
- The **Precision Forestry Centre** in Edmundston who is working on a drone equiped with LIDAR for analyzing tree populations and determining the most efficient harvesting techniques for industry.

ROOM FOR IMPROVEMENT.

Our Innovation Capacity Development Fund is primarily for the purchase of new scientific equipment and infrastructure. As we continue to build bridges between research and industry, we recognize that infrastructure can be used by other researchers for new, unrelated projects.

To maximize the potential use of the tens of millions of dollars of equipment we've helped acquire, we are launching a new SaaS that will helps us, industry and researchers identify who has what and where and make the connections needed to develop new innovations.



WASTEWATER USED TO BE SOMETHING WE DUMPED INTO THE ENVIRONMENT. THEN WE LEARNED HOW TO TREAT IT. NOW WE'RE LEARNING HOW TO VALUE IT.

THAT'S RIGHT. NOT ALL WASTEWATER IS THE SAME. INDUSTRIAL WASTEWATER OFTEN HAS BIOMASS THAT CAN BE TURNED INTO ENERGY.

FRANÇOIS CHABOT IS WORKING ON METHODS INDUSTRY CAN USE TO DETECT, EXTRACT AND VALUE BIOMASS FOR MAKING FUEL.

THE PRIVATE AND PUBLIC SECTOR JOBS WE HELP CREATE GENERATE OVER $53 MILLION IN LABOUR INCOME EVERY YEAR.

$70K IS THE AVERAGE SALARY OF JOBS WE HELP CREATE.

[FOR RESEARCH **AND** ENTERPRISE]

AMIR KIANI leads the operations of Silicon Hall, a scientific research lab established in 2014. The purpose of the lab is to investigate laser material interaction, specifically those that involve micro and nano fabrication, solar cell and photovoltaic device construction, nano electromechanical systems and bionanotechnology.

Dr. Kiani is also an assistant professor in the department of Mechanical Engineering at the University of New Brunswick.

IT WASN'T LONG AGO WHEN BAR CODES WERE THE STANDARD FOR IDENTIFYING AND TRACKING PRODUCTS.

TODAY, IT'S THE RFID TAG STUCK INSIDE PRODUCT PACKAGING. BUT THERE'S A PROBLEM. IT'S METAL, WHICH IS AN ISSUE FOR PAPER RECYCLING.

DR YONGHAO NI'S PAPER-BASED RFID TAG SOLVES THAT PROBLEM. WITH A NEW RESEARCH TECHNICIAN VIA NBIF, IT'S NOW BEING PREPPED FOR COMMERCIALIZATION.

2014-2015

TALENT
RECRUITMENT FUNDING

Awarded in partnership with the New Brunswick Department of Post-Secondary Education, Training & Labour, our Research Technicians Initiative is designed to give principal researchers the highly-trained lab technicians they need to move their research from prototype to commercialization.

RESEARCHER	RESEARCH ORG	PRODUCT/TECH	INVESTMENT
Petra Kienesberger	UNB	Developing zebra fish to measure water toxicity	$ 75,000
Kecheng Li	UNB	Nano cellulose fibres and biocomposite tech	75,000
Yonghao Ni	UNB	Paper-based antennas for UHF and RFIDs	75,000
Erik Scheme†	UNB	Biomedical device research and development	75,000
Natalia Stakhanova†	UNB	Cyber security research and development	75,000
Céline Surette	UM	Bioindicators of contaminant exposure in humans	75,000
Marc Surette†	UM	Plant-based Omega-3 fatty acid production	75,000
Sandra Turcotte	UM	Advanced kidney cancer genetic therapeutics	67,500
William McIver Jr.	NBCC	Tech for NBCC Mobile Ideaspace facility	62,448

NBIF INVESTMENT	**$654,948**
LEVERAGED FUNDS	654,948
TOTAL IMPACT	**$1,309,896**

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† These research technician awards were determined by a separate competition in concert with our 2013-2014 NBIF Innovation Research Chair program.

FUNDING THE NEXT GENERATION.

Developing an innovation-based ecosystem and economy starts with what and how people learn. As both the business and academic worlds become more sensitive to rapid and complex change, it is our responsibility to ensure that our university graduates are prepared, and want to stay here.

This year saw the first awarding of our new Graduate Scholarships that provide up to $7,000 and $21,000 for masters and doctoral students respectively. In total, 192 graduate students received scholarships totalling $1.3 million from NBIF, plus $712,000 from their host universities and another $2.3 million from national granting agencies.

NBIF also continued its Research Assistantships Initiative (RAI) which pays students to work on real world projects in their professors' laboratories. Now in its 11th year, our RAI awarded a record amount of assistantships in 2014-2015: 181 for a total of $1.5 million, representing 180% growth over the past five years.

2014-2015

STUDENT FUNDING

BY INSTITUTION

INSTITUTION	SCHOLARSHIPS	ASSISTANTSHIPS	AWARDED
University of New Brunswick	136	91	$ 1,745,000
Université de Moncton	48	62	793,000
Mount Allison University	8	14	141,000
NBIF Research Chairs		8	80,000
NBCC		4	30,000
St. Thomas University		2	10,000

NBIF INVESTMENT	**$2,799,000**
LEVERAGED FUNDS	**2,997,000**
TOTAL IMPACT	**$5,796,000**

UNB's DR AMIR KIANI INVENTED A NEW SURFACE TREATMENT FOR TITANIUM IMPLANTS THAT ENCOURAGES BONE AND SOFT TISSUE ATTACHMENT AND GROWTH.

IMPLANT REJECTION IS PAINFUL AND COSTLY. THIS NEW MATERIAL WILL REDUCE REJECTION AND SPEED UP HEALING AND RECOVERY FOR PATIENTS.

THROUGH OUR RESEARCH ASSISTANTSHIPS INITIATIVE, DR KIANI HAS THREE ENGINEERING STUDENTS HELPING HIM REFINE THE TECHNOLOGY. A VALUABLE AND UNFORGETTABLE EXPERIENCE.

OUR NEW RESEARCH CHAIRS CREATE NEW OPPORTUNITIES.

BRIDGING THE GAP BETWEEN RESEARCH AND ENTERPRISE STARTS WITH BRINGING THE TWO TOGETHER.

Our Innovation Research Chairs are exclusively focused on research that helps private sector companies develop new and improved products, services and technology.

Each of our 2014-2015 chairs received $1,000,000 in applied research funding, to be spread over five years, plus two graduate research assistants and one research technician, valued at $175,000.

To find out how all of our research chairs can impact your industry, please visit the research chairs page of our website.

QUESTIONS COMMENTS:

If you have questions or comments about our 2014-2015 Annual Report, please contact us by telephone or email at:

877-554-6668
info@nbif.ca

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Canada

DR. YING HEI CHUI at the Wood Science Technology Centre is developing incredibly strong, new wood-based products for the construction of mid-rise buildings as high as 20 storeys in Canada and abroad. A true breakthrough, Dr. Chui's work will be the basis for updating specific Canadian Building Codes. Dr Chui's carbon-neutral wood hybrid products are expected to lead to widespread use in the future.

DR. DUANE BARKER works with industry to apply his expertise in parasites and diseases in cultured and wild fish and develop advanced methods for their mitigation and control. The value of New Brunswick's fish and seafood exports reached $1 billion in 2013. Climate change, its associated ocean acidification, and industry pollution is threatening the traditional fishing industry. Dr Barker's aim is to help New Brunswick aquatic industries overcome these challenges.

DR. JOCELYN PARÉ is a world renowned expert on the use of nuclear magnetic resonance spectroscopy to analyze contaminants in the air, the earth and plant and animal tissues. Installed at the Atlantic Cancer Research Institute, he is developing new, non-invasive screening and treatment protocols for cancer via microwave assisted techniques. He aims to apply the same technology to wood, food, biopharma and biopesticide industries.