



Issue 3 - June 2010

Latest News

- Funding Doubled for College-Industry Partnerships
- More Funding, More Partnerships
- Be Informed About Your Partnership Opportunities

Successful Partnerships

- Companies Value Speedy Decisions on Engage Grants
- Long-Term University Ties Good for Business
- Turning Obstacles into Opportunity
- Partnerships Reduce Emissions, Increase Profits

Trade Secret

- It's All About Lasting Relationships

Latest News

Funding Doubled for College-Industry Partnerships

The 2010 federal Budget provided NSERC and its sister granting agencies, the Canadian Institutes of Health Research and the Social Sciences and Humanities Research Council, with an additional \$15 million annually to build partnerships focused on technology transfer and commercialization between small and medium-sized businesses and Canadian colleges. So far, NSERC has committed \$50 million to 34 projects through the College and Community Innovation program since the initiative was made permanent in Budget 2008.

More Funding, More Partnerships

NSERC's new [Strategy for Partnerships and Innovation](#) (SPI) received an important endorsement in this year's federal Budget that will help create and sustain even more partnerships between higher education researchers and Canadian businesses. The Budget assigned \$5 million annually in new funding to support building bridges between businesses and researchers through SPI. Decisions on how to allocate this money will be made shortly.



Be Informed About Your Partnership Opportunities

If you would like more details about the additional funding for research partnerships in the federal Budget, we encourage you to [subscribe](#) to this e-mail bulletin. We will update you with more specifics on the Budget measures in upcoming editions of *IN Partnership* as they are made available.

Successful Partnerships

Companies Value Speedy Decisions on Engage Grants

Companies joining in on applications for partnership funding are getting approval faster than ever with NSERC's recently launched [Engage Grants Program](#). NSERC promises a turnaround of six weeks for applications, to keep in line with the program's mandate to help companies find solutions for specific problems within six months. As of April 26, 2010, almost 90 of these grants have been approved for fast-track funding, the majority involving businesses new to NSERC-funded partnerships.

For their part, industrial partners are enthusiastic about the quick decision process that allows them to proceed with projects shortly after they are proposed.

"We were truly amazed at the speedy turnaround on our joint funding submission with McMaster University," said Gerard Campeau, President of Thermal Electronics Corporation in Aurora, Ontario. "It would have been even quicker if we had written the proposal more clearly at the outset."

For some businesses, implementing an innovation in the near-term can mean the difference between a banner year or going bust. In Atlantic Canada, the Winery Association of Nova Scotia has entered into a new research partnership with Kirk Hillier of Acadia University to develop an integrated pest management strategy for the province's grape growers.

"A bad outbreak of pests can easily bankrupt some of the smaller vineyards, so this project is of great importance to our Members," explains Janice Ruddock, Managing Director of the Winery Association. "This is our first time working through an NSERC-funded partnership, and we were extremely impressed with how swiftly the agency processed the application for funds."

Not all projects need to start from scratch, either. Some companies with a development underway seek partnerships that will help them deliver a final product faster. For instance, researchers at the Université du Québec à Montréal (UQAM) are collaborating with Anatis Bioprotection to improve the effectiveness and shelf life of its bio-pesticide products to compete against their chemical equivalents.



"This project with UQAM is critical to bringing our bio-pesticide to market as rapidly as possible," remarks Anatis President Silvia Todorova. "We are very pleased that NSERC moved so quickly to fund our proposal."

Long-Term University Ties Good for Business

Thanks to better access to specialized expertise and equipment, R&D collaborations with academic partners generate benefits that include finding solutions to specific problems and making businesses more attractive to global investors.

Howard Goodfellow, President of the process control technology company Tenova Goodfellow Inc., has experienced that first hand through his relationship with University of Toronto mechanical engineer Murray Thomson. Goodfellow initially hired Dr. Thomson as an NSERC Industrial R&D Fellow in 1994 and has maintained the working relationship ever since Dr. Thomson returned to his academic roots at the university two years later.

"Hiring Dr. Thomson, with NSERC's support, was our first important step toward becoming a technology company," recalls Goodfellow. "But I was supportive of his move back to the university because it gave us access to the kind of early stage research that we need in order to remain competitive, but cannot afford as a small company. Through NSERC industrial scholarships, we also get a window on the highly skilled students trained in his lab and have hired several of them."

Goodfellow says the partnership really paid off when his company was going through the process of becoming part of a larger global enterprise. Tenova, an advanced technology business based in Italy, is a \$26 billion company that employs about 53,000 people worldwide.

"Our relationship with Dr. Thomson and the university," says Goodfellow, "was key to Tenova's decision to designate us as its global centre of excellence in process optimization and combustion R&D. It really set us apart from other companies in the Tenova group competing for the same mandate."

Tenova Goodfellow Inc. has sustained its relationship with Dr. Thomson to this day and, as a result, business has flourished. In fact, since 1994, Tenova Goodfellow Inc. has expanded five-fold to a staff of 25, having successfully transitioned from a modest consulting firm to a world-leading provider of technology solutions for optimizing steel-making processes.



Turning Obstacles into Opportunity

Quality control or safety concerns about their products can challenge the reputation of business in today's fiercely competitive marketplace. Partnering with university researchers to solve problems and mitigate risks can help quickly restore credibility with customers and turn a damaging perception into an opportunity to become a proactive industry leader.

For the past four years, the Wood Pellet Association of Canada (WPAC) has joined with researchers at the University of British Columbia (UBC) to solve problems with storing wood pellets. WPAC needed a way to maintain credibility with customers, particularly in off-shore markets that now consume more than one million tonnes of Canadian pellets annually.

Based on their findings about the effects of certain storage conditions, the partners now lead the world in the development and dissemination of new safety protocols for storing and handling wood pellets. Now, customers see WPAC as an organization that is raising the industry standards and creating a better, safer product because of it. As an added bonus, the Canadian industry is also pioneering new product formulations that could result in safer and higher-energy wood pellets.

"Our credibility in the marketplace was severely hampered by some unfortunate incidents in Europe," explains Staffan Melin, Director of Research for WPAC. "Thanks to our partnership with Jim Lim and his team at UBC, we have more than restored our reputation. We are now considered world leaders in wood pellet off-gassing research and related safety standards—this would not have been possible without the support of NSERC."

Partnerships Reduce Emissions, Increase Profits

As concern grows over the impact of emissions on the environment, Canadian companies often find themselves struggling to continue operations in a way that meets stricter emissions standards. Many of these companies are learning that university researchers have effective ideas about how to improve current technology in a way that makes it more efficient, cost-effective and environmentally friendly.

A partnership between Calgary-based Enersul Inc. and researchers at the University of Calgary has taken the company's industry-leading sulphur forming technology to a new level, making it more efficient, cost-effective and environmentally friendly.

In 2005, Enersul needed a solution that would allow its sulphur formation business to continue meeting current and future regulations. Enersul engineers sought advice from Chao Tan, associate professor of mechanical and manufacturing engineering at the University of Calgary. When Dr. Tan suggested that his team would be able to cut Enersul's particulate emission control costs in half, a new partnership was formed with support from an NSERC Collaborative R&D Grant.



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The two-year project produced new technology that exceeded Dr. Tan's estimate and reduced the cost of particulate removal technology by nearly two thirds, representing huge savings for the company's operations. This technology has since been incorporated into the company's latest sulphur forming unit and strengthened Enersul's reputation as a leading edge company in sulphur formation.

"We have also been able to scale down the size of our granulator technology to better suit the needs of the customer," said David McInnis, Enersul's Vice-President of Operations. "Our latest model is truck-mountable, which represents significant savings for our customers in terms of assembly and construction."

McInnis also points out that the benefits of his company's partnership with Dr. Tan go far beyond cost-effectiveness.

"We really benefit from the enthusiasm of the students and the rigour of the program," he said. "If we were to do this all ourselves, we would need to have it verified and validated at many different levels before we could take it to market. Working with the master's and PhD students is also an advantage in terms of potential company employees, and we ended up hiring one of the graduate students who worked on this project."

Trade Secret

It's All About Lasting Relationships

Universities and colleges are full of researchers with ideas and expertise that can help your business solve short-term problems and provide fundamental insights into longer-term technological challenges. Many companies are first attracted to universities and colleges to access a unique piece of equipment or solve a specific issue. This often leads to enduring relationships with professors or students that are of even more value to the company. Currently, there are about 3,000 professors and 7,000 students engaged in research partnership projects funded by NSERC.

Share your story

Have an NSERC R&D Partnership success story to share? Please send a brief summary to editor@NSERCPartnerships.ca.

Contact Us

For more information about NSERC's partnerships programs and how your business can become involved and benefit, please call toll free at 1-877-767-1767. You will be connected to a representative in one of our five regional offices who can assist you.



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