Ideas Innovation Impact

Research and Innovatior Annual Report 09-10





Everyone Makes a Mark

Research at Ryerson:

Rooted in what is. Inspired by what can be. A better world.

The mission of the Office of the Vice-President, Research and Innovation is to create a research environment that is supportive of the highest quality scholarly, research and creative activity by maximizing opportunities for funding, and providing an infrastructure and environment conducive to outstanding individual and collaborative investigation leading to opportunities for broad social impact.

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Message from the Office of the Vice-President

Dear Colleagues,

I am pleased to present the 2009-10 annual report on scholarly, research and creative (SRC) activity for Ryerson University, and would like to acknowledge that this activity occurred during the four-year tenure of Tas Venetsanopoulos as Vice-President, Research and Innovation. This has been an outstanding year, and one in which we have made significant progress on a number of key fronts. We have seen the university's research enterprise strengthen and opportunities to enhance the academic life of the university expand.

Over the past year, Ryerson has continued its leadership role as a diverse, distinctive, urban university where we learn, teach, engage in creative practice and conduct research. We continue to fortify the important relationship between teaching and research. We have begun the construction of an innovative research pathway for undergraduate students that will provide a continuous opportunity for SRC experiences from the time that they arrive at Ryerson, through until the point of graduation.

Through the Research and Innovation website (www.ryerson.ca/research), we are already communicating to our internal and external constituents the quality, breadth and value of SRC activity at Ryerson. Building on this, greater public advocacy and a communications strategy to strengthen relations with government, the community at large and commercial stakeholders will enhance Ryerson's profile and reputation, and increase our ability to attract research funds.

In keeping with Ryerson's Academic Plan, the Office of the Vice-President, Research and Innovation (OVPRI) has made a commitment to reach new levels of excellence and prominence in research. You will read about some of the highlights in this report.

This has been a remarkable year. Our achievements in SRC activity, and our focus on students and partnerships, give us a great place from which to continue to build on the momentum that has brought us to this point.

Carla Cassidy, Interim Vice-President, Research and Innovation

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Measuring Success



Henry Parada has created a school of social work in the Dominican Republic.



Richard Lachman explores new ways to tell stories.

Research performance can be measured by a variety of indicators. Typically, universities have used input measures, focusing on the amount of research funding received by Ryerson faculty members, as well as publications and citations, among others. However, we recognize that not all SRC activity is tied to, nor can it be measured by, these performance indicators. The OVPRI is looking into ways to evaluate and recognize other types of scholarship and creative activity, including the performing arts, the fine arts, design and exhibitions, and the ways in which all research impacts society.



Filiz Klassen wants architecture to respond to the environment.

We will mark our progress by such measures as:

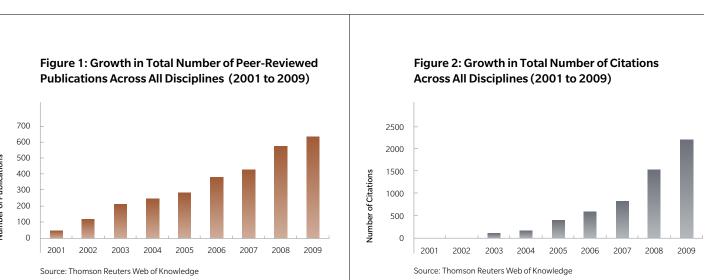
- our ability to attract leading researchers as candidates for faculty positions
- the number of national and international awards, and prizes received by faculty
- research performance appropriate to different types of SRC activity
- the visibility and impact of the research
- the quality of our graduate and postdoctoral applicants
- undergraduate student exposure to, and participation in,
- research projects • research funding
- national and international collaborations
- publications and citations
- new private-sector partnerships
- successful knowledge transfer and commercialization

The OVPRI is looking into ways to evaluate and recognize other types of scholarship and creative activity.

Publications and Citations

SRC publications produced by an institution, and the quality or impact of those publications, measured by the number of times that they are cited in other publications, are two indicators of successful research performance. Publications and citations are indexed by a number of organizations, including Thomson Reuters, whose data has been used in the preparation of this report.

Between 2002 and 2007, Ryerson was ranked first in publication growth amongst Canadian universities, with a remarkable 171% increase. Between 2001 and 2009, the average annual growth in citations was an astounding 155%. Figure 1 and Figure 2 show the growth in the total number of publications and citations, respectively, for all disciplines.





Souraya Sidani focuses on what patients want in health care.

Faculty Honours and Awards

As one of Canada's fastest-growing teaching and research institutions, Ryerson's reputation rests upon, among other things, the quality of its faculty members. This year, the OVPRI initiated a university-wide Honours and Awards strategy to ensure that outstanding faculty members receive the recognition they deserve through a focused and coordinated nomination process. The OVPRI will work across the institution to identify opportunities, and assist faculty and staff members with application processes.

Our co-ordinated efforts are producing results in the area of honours and awards. The 2010-11 annual report will report on the receipt by Ryerson of the inaugural National Visiting Scholar Fellowship of the Trudeau Foundation. This was awarded to **Steven Loft**, who is working with **Doina Popescu**, director of the Ryerson Gallery and Research Centre.

Our faculty members continue to receive national and international honours, awards, prizes and fellowships, and election to groups that recognize outstanding scholarship and achievement. Some examples of those accomplishments include:

Royal Society of Canada (RSC)

The RSC is the country's national academy and the senior national body of distinguished Canadian scholars, artists and scientists. Fellows of the RSC are selected by their peers for outstanding contributions to the natural and social sciences, the arts and the humanities.

In 2009, **Irene Gammel** of the Department of English received this prestigious award, and joined **Bruce Elder** of the School of Image Arts and dean emeritus **Maurice Yeates** as a fellow of the RSC.

American Association for the Advancement of Science (AAAS)

Fellowship in the AAAS is an honour bestowed upon members by their peers. Fellows are recognized for meritorious efforts to advance science or its application. This year, **Ravi Ravindran** of the Department of Mechanical and Industrial Engineering was awarded this prestigious fellowship.

Since 1991, Ravindran and his team of research associates at Ryerson's Centre for Near-net-shape Processing of Materials (CNPM) have been working on applied research to revolutionize the auto and aerospace industries by promoting increased use of aluminum and magnesium alloys. CNPM has earned recognition for Ryerson from the Magnesium Division of the American Foundry Society, which presented the university with the Outstanding Organization Award.

Canadian Urban Institute (CUI)

The Urban Leadership Awards program honours individuals, groups and organizations that have made significant contributions to improving the quality of life in Canada's cities and urban regions. In April 2009, the **Ryerson Entrepreneur Institute (REI)** received the the CUI's Prosperity Award, which recognizes initiatives that build a city's capacity to generate wealth, and enable its people to benefit from the strengthening and development of the local and regional economy. Since its launch in 2008, REI has facilitated the establishment and expansion of more than 25 new businesses that have raised over \$800,000 in funding and created \$2.7 million in new economic prosperity in the Greater Toronto Area.

Honorary Doctorates

An honorary degree is an extraordinary academic distinction that honours a famous or distinguished visitor's valuable contribution to society. In 2009, **Ojelanki Ngwenyama** of the Ted Rogers School of Information Technology Management received this international recognition from the University of Pretoria, South Africa. Ngwenyama is director of the Institute for Innovation and Technology Management in the Ted Rogers School of Management.



Irene Gammel, who was named a fellow of the RSC in 2009, holds the Canada Research Chair in Modern Literature and Culture. She is also director of Ryerson's Modern Literature and Culture Research Centre, which is dedicated to the preservation and study of early 20th-century texts and artifacts.

Ravi Ravindran, right, was was named a fellow of the AAAS for his distinguished contributions in the science and engineering of light alloys, and for leadership in the Canadian engineering community. He is pictured here with postdoctoral fellow **Sophie Lun Sin**.





Ojelanki Ngwenyama received an honorary doctorate from the University of Pretoria, South Africa, in recognition of his international contributions to the field of information systems, and particularly research methodologies in informatics.



The **Ryerson Entrepreneur Institute** received the Prosperity Award from the CUI in 2009. A university-wide program that motivates and helps students, alumni and others to start and grow new businesses, the institute is run by Ryerson's **Students In Free Enterprise** team.

Research Funding

Research funding at Ryerson has been in a phase of accelerated growth for the past several years (Figure 3). The introduction of research infrastructure programs at both the federal and provincial levels has especially contributed to this progress and development.

Over the past decade, research activity at Ryerson has increased five-fold. In the last year alone, Ryerson's externally funded research increased by 23%. With more than \$22 million in research funding, Ryerson ranked 30th among the top 50 research universities in Canada in 2009. This standing represents a jump of nine positions in the past four years.

The university is measuring research intensity as the value and number of peer-adjudicated research grants per eligible faculty member. Figure 4 shows the change in research intensity across all faculties between 2001 and 2009.

This annual report provides a current breakdown of funding by sector (Figure 5), and details of the individual sector growth that has contributed to this astonishing rise in research funding.

Figure 5: Research Funds by Sector (2009-10)

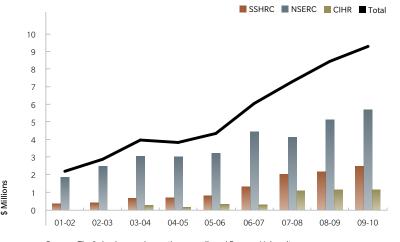
Federal Government

Tri-Councils (CIHR, NSERC, SSHRC)

Tri-council funding earned by Ryerson researchers directly influences other programs, particularly the university's Canada Research Chairs and allocations of federal indirect costs.

Since 2001-02, contributions from the federal researchgranting councils have comprised an increasing amount of total research funding at Ryerson, rising from 26.33% to 41.33%. Growth in total funding from the federal researchgranting councils is shown in Figure 6.

Figure 6: Federal Research-Council Funding



Sources: The federal research-granting councils and Rverson University

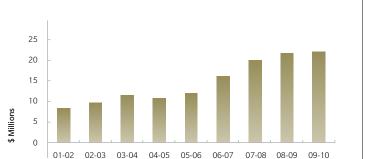
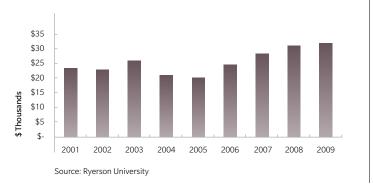
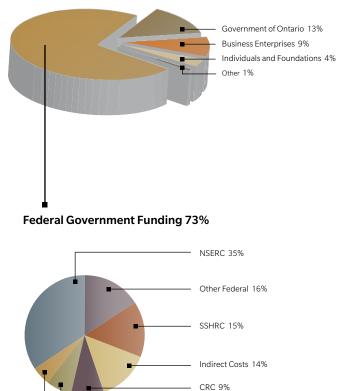
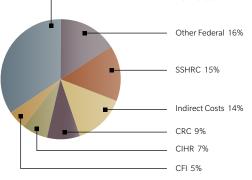


Figure 3: Total Research Funds (2001-02 to 2009-10)

Figure 4: Research Intensity (\$/Full-Time Faculty)







Sources: The federal research-granting councils and Ryerson University.

Source: Ryerson University

Market Share

Total direct costs of research awarded to Ryerson from the federal research-granting councils have generally increased from year to year, but it is important to track whether these exceed, or fall short of, increases in council funding to all Canadian colleges and universities.

Ryerson continues to grow its share of investment by the federal research-granting councils: the Social Sciences and Humanities Research Council of Canada (SSHRC), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Canadian Institutes of Health Research (CIHR) (Figure 7).

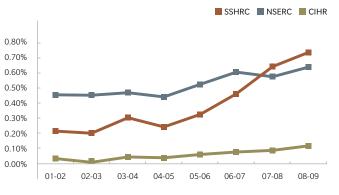


Figure 7: Percent Share of Federal Research-Council Funding

Sources: NSERC Facts & Figures 2008-09 report; SSHRC Payments by Program Activity, Architecture, Region, Province & Institution 2004-05 to 2008-09 reports; CIHR Funded Research Database: Funding by Institution 2001-02 to 2008-09; and Ryerson University. Note: Values on the v-axis represent Rverson's portion of the total funding provided by each of the federal research-granting councils.

Canada Foundation for Innovation (CFI)

The CFI was created by the federal government in 1997 to fund research infrastructure. The program's mandate is to strengthen capacity at Canadian research institutions so they can operate at world-class levels. Through its initiatives, the CFI is a key participant in attracting researchers to Canada, building outstanding institutions and catalyzing innovative research. Funding from the CFI is matched by the Ontario Research Fund — Research Infrastructure program, and private-sector and institutional contributions.

Ryerson has received \$5.6 million to date from the CFI. Together with the Ontario Ministry of Research and Innovation contribution, this has amounted to more than \$11 million in total research infrastructure funding from these two agencies.

Canada Research Chairs (CRC)

The CRC program was introduced by the federal government in 2000 to help universities recruit and retain excellent faculty members, and to strengthen Canada's position among the world's top research nations. The initiative is the most visible research personnel awards program in Canada and is directly related to an institution's level of tri-council research funding. The total number of chairs was set at 2,000, with half designated Tier 1 and the other half designated Tier 2. Each chair is associated with a federal research-granting council, and Ryerson's current allocation of CRCs is 12.

Early Researcher Awards (ERA)

The ERA program helps promising, recently appointed Ontario researchers build their research teams of undergraduates, graduate students postdoctoral fellows, research assistants, associates and technicians. The goal of the program is to improve Ontario's ability to attract and retain the best and brightest research talent. In 2009, Ryerson researchers **Colleen Carney, Ben Dyson** and **Victor Yang** received this prestigious award.

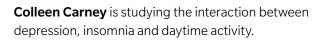


Ben Dyson is exploring how our brain can take information transmitted from our five senses simultaneously and turn it into something meaningful.



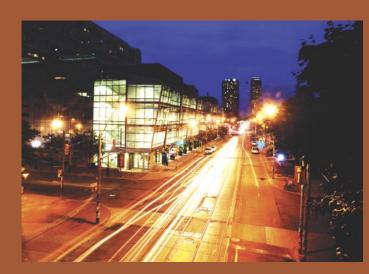
Networks of Centres of Excellence (NCE)

The NCE GRAND (Graphics, Animation and New Media) is a \$23-million research program, funded by NSERC and SSHRC, that brings together the best minds from a multitude of disciplines and industry sectors to further Canada's success as a leader in the digital-media economy. Recognizing Ryerson's strengths in this area, the NCE GRAND draws upon leadership from two Ryerson faculty members. **Abby Goodrum**, associate dean of SRC activity in the Faculty of Communication & Design and Velma Rogers Graham Research Chair in News Media and Technology, is director of social science and humanities research for the entire GRAND network. **Catherine Middleton**, who holds the Canada Research Chair in Communication Technologies in the Information Society, is leader of the NCE GRAND's new media challenges and opportunities theme.



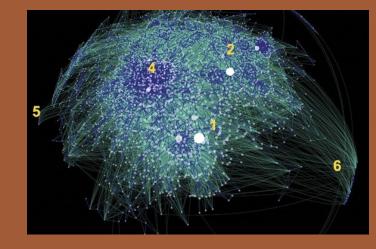


Victor Yang's work in optical coherence tomography will help surgeons see as clearly as if they were operating on a dinosaur, instead of a human.













Ryerson is committed to transferring research knowledge and technology to the marketplace.

Knowledge Transfer and Commercialization

Ryerson is built on a foundation of successful technology research, development and production. As part of its mission, the OVPRI is committed to transferring research knowledge and technology to the marketplace. The university believes that academic knowledge inherently includes the responsibility to use innovation to address real and anticipated challenges, and to further the social and economic well-being of Canada and its citizens.

Related to their focus on achieving maximum returns on public investments, both the federal and provincial governments have developed research agendas linked closely to knowledge and technology transfer, and a stronger commitment to commercialization. Ontario's research and innovation strategy asserts that these factors are critical to creating and sustaining the next generation of high-knowledge, high-value jobs, and to ensuring ongoing prosperity and competitiveness. The federal science and technology strategy emphasizes the key role of translating knowledge into commercial applications for economic growth and improved quality of life. Ryerson's commitment to enriching society with the results of its research through application and commercialization contributing to clear social and economic benefits aligns well with the federal government's priorities outlined in the science and technology strategy.

The process of knowledge transfer and exchange can take many forms. Those methods include training students, publishing research papers, collaborating with industry partners, and developing and licensing commercial products.

The OVPRI is currently building its Innovation and Partnership unit to provide support related to:

- industrial research collaborations and funding agreements
- strategic innovation partnerships
- intellectual property disclosure, management and ownership assignment
- proof of principle research and development
- knowledge transfer and commercialization





Tony Hernandez of the Department of Geography is director of the Centre for the Study of Commercial Activity (CSCA). Housed in the Ted Rogers School of Management, the CSCA studies, and develops research publications for, Canada's commercial and retail industries. The CSCA was founded by **Ken Jones**, past chair of the Department of Geography and now dean of the Ted Rogers School of Management.





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Deborah Fels, director of the Centre for Learning Technologies (CLT), helps people with disabilities widen their experience of entertainment and the performing arts. One of her innovative projects is the Emoti-Chair, an interdisciplinary project that was developed with artist and associate Graham Smith; Frank Russo, director of Ryerson's Science of Music, Auditory Research and Technology lab; and Maria Karam, a postdoctoral fellow in the CLT. The Emoti-Chair is part of Ryerson's Alternative Sensory Information Display, a project geared towards exploring alternative methods for presenting sensory information to users who are deaf or hard of hearing.

Industry Investments in Research

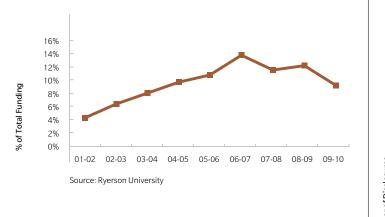
Industry-university research collaborations generate benefits for both parties. Indeed, the willingness of industry to invest in university-based research is indicative of the commercial relevance of the institution's knowledge and innovation. Figure 8 shows the contribution of these investments to total research funding at Ryerson over the past several years.

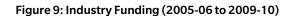
One of the immediate benefits arising from industryuniversity research collaboration is the availably of matching funding from government programs. Ryerson, in fact, has received matching funds from such organizations as the tri-council, the National Centres of Excellence and the Ontario Centres of Excellence, amongst others. Through these matching programs, the university has increased its research funding by 23% (Figure 9).



A university invention disclosure is a confidential, written description of any invention that an innovator has made in the course of undertaking academic research. At Ryerson, a faculty member is required to file an invention disclosure with the OVPRI for any invention upon which he or she intends to file a patent application. As such, invention disclosures are an accurate gauge of Ryerson's capacity to provide access to its knowledge (Figure 10).

Figure 8: Growth of Industry Funding as a Percentage of Total Research Funding





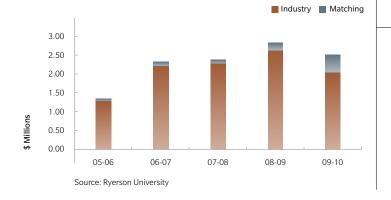
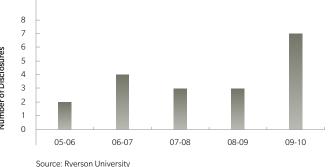


Figure 10: Invention Disclosures (2005-06 to 2009-10)

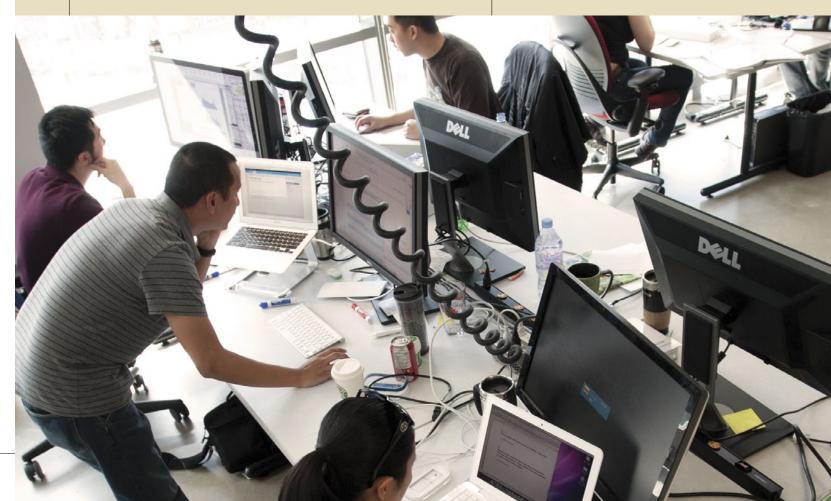


Commercialization

Whether to an established company or a universitycreated spinoff organization, the licensing or other commercialization of university-developed inventions is one route to knowledge transfer that not only results in the practical application of university research, but can also result in a flow of revenue back to the university

In addition to its partnership in MI, Ryerson is a founding and inventors. member of the Ontario Partnership for Innovation and Commercialization (OPIC). This virtual network consists To support and increase the commercialization activities of of specialized technology-transfer experts from seven Ryerson, the university has partnered with 13 other Torontouniversities. Working together, they enhance the member based research institutions to create MaRS Innovation (MI). institutions' knowledge- and technology-transfer capacity This federally incorporated, non-profit organization acts as by sharing expertise and educational resources, and a commercialization agent for its members' technologies. partnering with clients within the universities and their surrounding communities. Ryerson, on behalf of its OPIC MI receives funding from its member institutions and partners, has received more than \$2 million in funding the Canadian government through the National Centres from the Ontario Research Commercialization Program of Excellence for Commercialization and Research in support of technology-transfer activities, including program. Through its membership in MI, Ryerson \$861,000 for proof of principle research.

Ryerson's Digital Media Zone: innovation and entrepreneurship are at the heart of this multidisciplinary initiative.



benefits from commercialization expertise and funding that would otherwise not be available. Moreover, MI's strong connections with business, industry and venturecapital communities, and its ability to identify potential commercialization opportunities, helps ensure that Ryerson inventions are transformed into commercial products.

Social Impact

One of the most important outcomes of research is its beneficial impact on society, whether in Canada or globally. This may result in improvements in health and health-care management, education, human rights, transportation, safety, cultural innovation, social well-being, the urban environment and energy conservation, to name just a few.

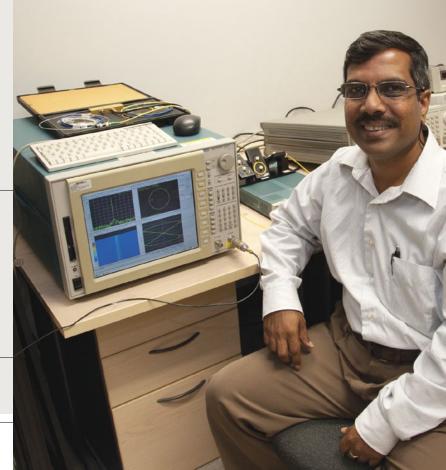
Increasingly, the societal benefits of academic research are being used as markers of its success. It's not easy to quantify the enormous impact that faculty members have on society through the exchange of ideas, and lectures, books, articles, interviews, reports, exhibitions and performances. A large number of faculty members, and the students they supervise, take part in discussions with policy-makers on how to improve our society based on insights gained through research activities. These discussions may be informal, or they may take place in the public domain as media interviews, expert commentaries, or membership on expert committees and task forces. Little has been done to date to quantify these activities and their potential for societal impact.

Despite the challenge of measuring the social impact of research, Ryerson has committed, in its Strategic Plan for SRC activity, to explore new ways to assess this output.

Here are just two examples of the significant societal impact of Ryerson research endeavours.



Elizabeth McCay of the Daphne Cockwell School of Nursing holds the Research Chair in Urban Health. She is also the lead researcher in a CIHR project that addresses the lack of evidence-based, mental-health programs for street-involved youth. This project addresses the lack of clinical services, and will provide strategies and interventions to meet the mental-health needs of youth who are homeless or unstably housed. Together with fellow Ryerson researchers Linda Cooper, Souraya Sidani and Heather Beanlands, and partners from Dalhousie University, the University of Calgary, the Centre for Addiction and Mental Health, St. Michael's Hospital, Covenant House and Wood Homes, the project will directly address the Mental Health Commission of Canada's specified priority area of mental health and homelessness in youth.



Tragic stories of mine accidents have been told many times in international headlines. Thanks to the work of Electrical and Computer Engineering professor **Xavier Fernando**, however, the lives of countless miners could be saved in the future with an innovative technology that makes wireless communication possible deep within the Earth's crust.



The Next Generation

Creating new knowledge through SRC activity presents unique opportunities to mentor the next generation of scholars and innovators. In addition to the intensive research training received by graduate students and postdoctoral fellows, Ryerson is committed to creating meaningful research experiences for undergraduate students to participate in faculty-mentored, summer research projects in any area of SRC activity at the university.

Undergraduate Research Opportunities Scholars

In 2010, the OVPRI launched the Undergraduate Research Opportunities (URO) Scholars Program, designed to provide undergraduate students with the opportunity to participate in meaningful research and to contribute to the advancement of knowledge in their area of interest. URO Scholars learn how to conduct research, analyze data and collaborate effectively in research settings, while investigating areas of research interest within a specific discipline and gaining practical skills and knowledge, which will benefit them in both graduate and postgraduate studies.

Ryerson is working to increase the number of opportunities provided in future years, to provide a research pathway to engage undergraduate students progressively in research experiences from the time they accept a place at Ryerson to their entrance into a graduate program. The OVPRI's work in this area will be reflected in future annual reports.

In the meantime, however, URO Scholars have already achieved a number of successes. The students, for example, have co-authored and submitted papers to peer-reviewed journals, and have had posters accepted for presentation at conferences.

Graduate Students

As the scope of research at Ryerson has grown, so too has the university's number of graduate students (Figure 11 and Figure 12). Graduate students play a critical role in advancing the research enterprise at Ryerson.

MITACS, a Network of Centres of Excellence, has partnered with the federal and provincial governments to fund a series of graduate internship programs and fellowships that have an industrial focus. The programs, which support research in all disciplines, are aimed at pairing graduate students, or postdoctoral fellows and their academic supervisors, with Canadian companies to work on collaborative research projects. The program provides research and salary funding, and gives students the opportunity to apply their graduate research to a real-world challenge. Ryerson has been successful with these programs, receiving more than 40 awards of funding, including four postdoctoral fellowships.

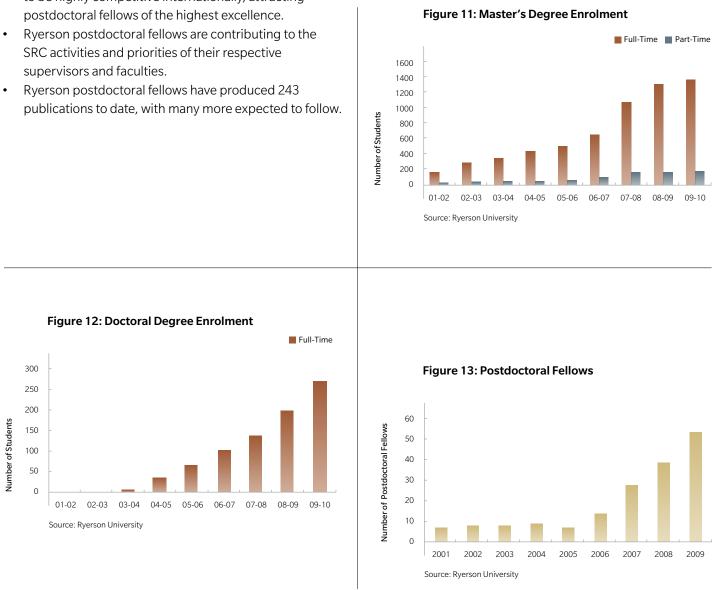
Postdoctoral Fellows

As Figure 13 illustrates, Ryerson's number of postdoctoral fellows has been on the rise. Postdoctoral fellows are Canada's most promising new generation of scholars in their final stage of training. These essential members of the university community form important SRC partnerships with faculty members, and serve as expert mentors to graduate and undergraduate students. Postdoctoral fellowships provide outstanding recent doctoral graduates in the critical early phases of their careers with the time and resources to focus their energies on sustained pursuit of their academic work, laying the foundation for a lifetime of distinguished contribution. Highly specialized and extensively trained, and often with limited or no teaching responsibilities, postdoctoral fellows are uniquely positioned to make significant contributions to the advancement of knowledge and the generation of new intellectual property.1

In fall 2007, Ryerson launched a pilot, three-year Postdoctoral Fellows Program. Thirty-nine Ryerson postdoctoral fellows have been appointed through this program, partnered by an additional 67 other postdoctoral fellows.

In the three rounds, Ryerson's postdoctoral fellows have been of exceptional quality, as evidenced by their tangible successes:

- The Ryerson Postdoctoral Fellows Program proved to be highly competitive internationally, attracting postdoctoral fellows of the highest excellence.
- SRC activities and priorities of their respective supervisors and faculties.



09.10









Vanier Scholar

Electrical Engineering PhD candidate Raymond Phan was awarded an NSERC Vanier Canada Graduate Scholarship, one of only 57 national Vanier Awards given out in 2010. Valued at \$100,000, the award is NSERC's most prestigious scholarship program.

Young Scientist Award

Supratim Ghosh, a postdoctoral fellow working with Dérick Rousseau of the Department of Chemistry and Biology, represented Canada at the Global Congress of Food Science and Technology in Cape Town, South Africa. This opportunity was made possible through the Young Scientist Award program of the International Union of Food Science Technology. Ghosh was one of seven candidates from around the world who were selected to present their research in front of a global audience.

Undergraduate Research Opportunities Scholar Psychology student Jennifer Belus, who worked with faculty member Candice Monson, examined treatment outcomes for military personnel with both post-traumatic stress disorder and chronic pain, and the effects of relationship functioning on these variables. Belus has had a poster accepted for presentation at the Military and Veteran Health Research conference.

Undergraduate Research Opportunities Scholar Midwifery student Jenna Robertson and faculty mentor Vicki Van Wagner presented their research at the Association of Ontario Midwives conference in May 2010. A second poster has been submitted to the international Normal Birth Conference, and an article has been submitted for publication.

Undergraduate Research Opportunities Scholar Arts and Contemporary Studies student Matthew Redding co-authored a paper with Catherine Ellis, a faculty member in the Department of History. Entitled "Young Liberals and Anti-Apartheid Campaigning, 1968-1970," the paper has been submitted to the peer-reviewed Journal of Liberal History.

Undergraduate Research Opportunities Scholar Social Work student Jake Pyne prepared analysis work, under the supervision of faculty member Henry Parada, which contributed to a presentation given by senior Catholic Children's Aid Society researchers at the Looking After Children conference in fall 2010.

Looking Ahead

Ryerson has unique strengths to build upon:

- The university is a leader in comprehensive, innovative and professionally relevant programming that ensures SRC activity reflects current realities, needs and opportunities.
- The university has a strong tradition of excellence as a centre for applied education and research. Furthermore, it is now one of Canada's fastest-growing teaching and research institutions, with expertise in a wide range of disciplines.
- The university is committed to enriching society by transferring knowledge and applying research findings.

Outlined below are the key priorities and strategies that will guide Ryerson's development and growth in SRC activity. The goals are achievable and measurable, and realizing them will provide opportunities for discovery and innovation, and return the greatest possible benefits back to society.

- Enhance existing areas of research strength and expertise, and create new research opportunities in strategic emerging areas of SRC activity.
- Promote Ryerson's research faculty members and institutional reputation regionally, nationally and internationally.
- Leverage collaborative research partnerships to broaden and deepen our research efforts, and enhance the university's profile.
- Stimulate novel, multidisciplinary research interactions across institutions and disciplines that will contribute to the development of innovative research and academic programs.
- Support an entrepreneurial research culture to facilitate better and faster knowledge transfer.
- Communicate and celebrate the university's successes.
- Invest in students by providing SRC training opportunities.
- Focus on the most effective and efficient use of research infrastructure resources.

The strategies set out here demonstrate the role that the Strategic Plan for SRC activity will play in creating a "virtuous circle" for Ryerson by helping to attract strong faculty members, and working with them to identify and act on opportunities, giving them the right tools and recognition, and promoting the university's achievements. Taken together, these actions will continue to build and enhance Ryerson's research reputation.



Bruce Elder seeks to reawaken audiences to the full range of human experience.

No university can afford to stand still amid profound changes in the knowledge economy.

Ryerson's Academic Plan, Shaping Our Future 2008-2013.

Advisory Board

Terms of Reference

- Deans of all faculties. The Board is advisory to the OVPRI.
- issues and directions of the university.
- applied research, knowledge translation, commercialization and industry.
- diversity of Ryerson and its research breadth.
- to time, to facilitate the implementation of its activities.

Members of the SRC Activity Advisory Board

Carla Cassidy

Interim Vice-President, Research and Innovation

Philip Coppack Associate Dean, Faculty of Arts

Wendy Cukier Associate Dean (Academic), Ted Rogers School of Management

Debora Foster Interim Dean, Yeates School of Graduate Studies

Abby Goodrum Associate Dean (SRC), Faculty of Communication & Design

Sri Krishnan (Ali Lohi 2010-11) Associate Dean, Faculty of Engineering, Architecture and Science

Madeleine Lefebvre Chief Librarian

Linda Vranic Executive Director, Research and Innovation

Janice Waddell Associate Dean, Faculty of Community Services

Scholarly, Research and Creative Activity

• The SRC Activity Advisory Board shall be representative of the research enterprise across Ryerson. Appointments are made by the Vice-President, Research and Innovation, and include the Associate

• The Board will be the leading venue for discussion, advice and guidance of the strategic research

• The Board will address all aspects of the research enterprise across Ryerson, including basic and

• The Board will advise on the use of effective performance indicators that describe and reflect the

• The Board will strike subcommittees, task forces and specialty groups of various types, from time

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Mark Blinch Dario Ruberto Dave Upham Nation Wong

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Office of the Vice-President, Research and Innovation Ryerson University 350 Victoria Street Toronto, Ontario M5B 2K3

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