

**Our Time to Lead: Academic Plan 2014-2019**  
**Report to Senate**  
**May 2016**

## Table of Contents

<b>I. EXECUTIVE SUMMARY .....</b>	<b>2</b>
1. Enable greater student engagement and success through exceptional experiences.....	2
2. Increase SRC excellence, intensity and impact .....	3
3. Foster an innovation ecosystem.....	3
4. Expand community engagement and city building.....	4
<b>II. FACULTY AND UNIT REPORTS (SUBMITTED TO THE PROVOST).....</b>	<b>7</b>
A. Faculty of Arts .....	7
B. Faculty of Communication and Design.....	9
C. Faculty of Community Services.....	12
D. Faculty of Engineering and Architectural Science.....	15
E. Faculty of Science .....	18
F. Ted Rogers School of Management .....	21
G. The G. Raymond Chang School of Continuing Education .....	24
H. Yeates School of Graduate Studies .....	28
I. Ryerson University Library and Archives.....	31
J. Office of the Vice-Provost, Students .....	33
K. Learning and Teaching Office .....	36
L. Zone Learning and the DMZ .....	39
<b>III. THE VPRI ANNUAL REPORT TO SENATE .....</b>	<b>42</b>

## **I. EXECUTIVE SUMMARY**

Ryerson University's five-year academic plan *Our Time to Lead* was launched in June 2014, and an update on the plan's first year was submitted to Senate in June 2015. During the past academic year all units of the University were requested by the Office of the Provost and Vice President Academic to provide updates on their plans in the form of both a progress narrative and an update commentary on each of their goals and objectives. These updates allow us to see the significant progress that has been made across the university toward the four core priorities outlined in *Our Time to Lead*.

This executive summary highlights areas of progress in the plan's four priorities during 2015-16. Progress within each of Ryerson's Faculties and academic units is detailed in Section II, while Section III comprises the VPRI annual report to Senate. First, an overall look on the progress on the four priorities.

### **1. Enable greater student engagement and success through exceptional experiences**

Ryerson continued to provide students with exceptional experiences. A new BA in Language and Intercultural Relations has been launched and its inaugural class arrives in September 2016. A new Chang School certificate in digital art production was launched, while five new minors – in social innovation, real estate management, global narratives, music & culture and philosophy – were established. Two new program-specific concentrations were also approved: a concentration in nutrition and health research in the nutrition program, and a concentration in software engineering in computer science. Also for the first time the possibility of offering double majors in Arts – in English & history, English & philosophy and history & philosophy – was approved, with exact launch dates to be determined.

In graduate programming, the following new degrees were approved by Senate, Quality Council and MTCU for a fall 2016 launch: Data Science and Analytics MSc; Child and Youth Care MA; Mathematical Modelling and Methods PhD; PhD, MASc and MEng in Biomedical Engineering; and Master of Engineering Innovation and Entrepreneurship (MEIE). New programs that are currently moving through the approval process include an MA in Criminology, Master of Community Health Services Management (MCHSM) and several Professional Master's Diplomas (PMDips).

#### **Learning and teaching**

LTO workshop attendance between 2014-15 and 2015-16 increased from 1,934 to 2,239 participants, while this past year also saw the first annual 3M Fellow Lecture. The 2015 annual faculty conference, on the topic of e-learning, saw attendance of 606, up from the previous year's 580. There were over 90 submissions by faculty. A new teaching chair position was added in TRSM, while teaching chairs held an unprecedented number of workshops within their faculties. The Universal Design for Learning Committee, which deals with making courses more accessible to students with accessibility issues, was relaunched in September. The LTO has been

preparing workshops and lunch and learn sessions to be offered during 2016-17 on experiential learning, e-learning, and mapping of course learning outcomes.

## **2. Increase SRC excellence, intensity and impact**

Scholarship, research and creative work continue to be a central priority of the university, with an ongoing commitment to build a university-wide culture that fosters inquiry, discovery, knowledge and creative works. As outlined in the VPRI update in Section III, research revenue for 2015-16 is projected to be about \$47 million, an increase of 65 per cent since 2011-12, exceeding the target of an average of 10 per cent per year. Overall, Ryerson is ranked 11<sup>th</sup> among non-medical universities in Canada in terms of research funding. In 2015, Ryerson researchers produced 1,032 academic publications, which represents over 7 per cent growth from 2014. Ryerson researchers were cited 12,381 times by other scholars, which represents over 20 per cent growth from 2014.

## **3. Foster an innovation ecosystem**

Ryerson's incubation capacity has risen from 5 Zones in 2012-13 to 10 Zones with over 200 teams today. In the last 2 years, companies at Ryerson have raised over \$148 million in investments and funding, have added over 1,700 jobs and produced high profile successes such as Hit Send, Figure1, 500px, Flybits and Bionik.

The OVPRI continued to distribute funds raised to support students (along with faculty) working on social innovation, specifically the RBC Immigrant, Diversity and Inclusion project, the McConnell Foundation RECODE Project and the Social Enterprise Demonstration Fund. Eight students received \$70,124 in funding along with 9 faculty who received \$81,815 courtesy of the RBC project. Thirteen students and 7 faculty members received more than \$100,000 in RECODE funding for social innovation projects.

Innovation-related initiatives are moving forward in individual Faculties as well:

- In Arts, the SocialVentures Zone continued to provide opportunities for students and alumni to move their ideas from initial conception to action. This year the Zone had 22 active ventures with 70 registered participants.
- In the Faculty of Communication and Design, plans for a new physical SRC hub have taken shape. This will be at the heart of the Creative Industries Resource Centre, with research clusters in each school in the Faculty to be connected with the Centre to promote interdisciplinarity.
- The Faculty of Community services convened a two-day Social Innovation Conference in March 2016, and the inaugural John C. Eaton Chair in Social Innovation and Entrepreneurship held a series of workshops on the topic of community partnership.

- In the Faculty of Engineering and Architectural Science, the iBoost Zone, an innovation acceleration platform geared to helping technology entrepreneurs, was launched and attracted over 100 students.
- The Faculty of Science piloted its own version of zone learning with the Science Innovation Zone (SIZ). In the project's inaugural year 23 science students presented their ideas for new processes, products or technologies. In addition the Institute for Biomedical Engineering, Science and Technology (iBEST) began operations in conjunction with St. Michael's Hospital.
- The Ted Rogers School of Management created three pilot Zones this year – the Zone Learning Analytics School, the Sport Innovation Hub (SPIN) and the Ryerson Global Innovation Challenge (RGIC) project. Additionally, the Faculty's Start-Up School provided fundamental entrepreneurial education.

#### **4. Expand community engagement and city building**

Community engagement and city building have involved various types of initiatives.

- For the past three years Ryerson has been the educational partner for Free the Children's WE Day Toronto. The partnership this year featured Ryerson's participation at the WE Day Toronto event at the Air Canada Centre in October 2015.
- As part of a five-year agreement, Ryerson hosted the Toronto competition of First Robotics, a nonprofit that runs technology-focused, mentor based robotic competitions for high school students all over Canada. Over 800 high school students competed in the three day event at the Mattamy Athletic Centre.
- The Ryerson community has been supporting PRIDE and the LGBT community annually with a range of awareness generating events on our campus. This year the University continued to partner with The 519 Church Street Community Centre to host the TreeHouse Party in the Ryerson quad. The university also provided the Ryerson Theatre free of charge as the venue for a live event with filmmaker John Waters.
- Ryerson's VolunteerLink, an online portal that matches students to community service and engagement opportunities, helped over 200 student participants engage in over 35 volunteer opportunities with over 25 community partners.

Similar initiatives were initiated by individual divisions. In Arts more than 20 courses engaged close to 1,000 students in service learning activities that addressed community priorities. In the Faculty of Community Services, the newly established City Building Institute held over 15 events for Ryerson students and the broader public, while Urban and Regional Planning faculty members were involved in the development and administration of the Centre for Urban Research and Land Development. The Chang School continued to support Aboriginal, first generation students, students with disabilities, internationally trained individuals and older adults with a range of innovative programming, with Gateway providing important new

educational options for internationally trained individuals and Spanning the Gaps significantly increasing enrolment in its program.

A range of partnerships and collaborations were forged as well:

- The Faculty of Communication and Design partnered with North by North East to host their interactive conference on gaming, music, technology. The conference will occur in June 2016 at Ryerson.
- The Faculty of Science and the Faculty of Engineering and Architectural Science were academic partners in *MythBusters: The Explosive Exhibition* at the Ontario Science Centre.
- The Esch Foundation has provided funds to support the Esch Awards program run by the Center for Engineering Innovation and Entrepreneurship (CEIE), which enables undergraduate and graduate students in the Faculty of Engineering and Architectural Science to pursue creating a business.
- Through the leadership of the Ted Rogers School of Management, Ryerson was the lead sponsor on a variety of Toronto Region Board of Trade event series and summits.
- The Chang School partnered with a total of 60 organizations on initiatives such as delivering new programming to internationally educated individuals, engaging in research and community outreach on lifelong learning and technology-enhanced aging, and providing new custom courses to working health care professionals.
- The Office of the Vice Provost, Students oversaw the forging of a partnership with Magnet, the career networking platform. In Athletics, a partnership with Canadian Interuniversity Sports saw Ryerson and the Ryerson Rams host for the first time a Final 8 weekend, one of the most important university sports events in Canada.
- The DMZ continued to develop and expand a global network of innovation Zones with 45 national and international partners, including close partnerships with Indian and South African incubators

### **Access and diversity**

EDI activities took place in various individual divisions for the university:

- Ryerson sponsored Tangled Art + Disability's Panamania show *PUSH! Real Athletes. Real Stories. Real Theatre*, positioning Ryerson and the School of Disability Studies as thought leaders in this important area. Workshops and rehearsals at the School of Disabilities Studies involved Ryerson students and faculty.
- All future courses developed by The Chang School's DES unit will meet AODA guidelines, with web accessibility Level AA compliance and all DES's existing courses are in the process of being retrofitted to meet AODA guidelines. Lake Devo, which was designed by the Digital Education Strategies unit to support online role-play activity in an educational context, was updated to meet AODA guidelines.
- EDI training was provided for all of Ryerson's Career Centre staff, while an Aboriginal blanket exercise and educational sessions were conducted for over 80 Student Affairs staff. The Tri-Mentoring Program expanded group mentoring to include mature students, Arab women in science, Latino/Latina students, and students with disabilities.

Counselling staff continued to receive specific diversity and anti-oppression training and professional development to be responsive to the mental health needs of diverse students.

- The Office of Sexual Violence Support and Education was established in August 2015 and the inaugural coordinator hired in November 2015. This office reflects the adoption of a new single policy to prevent sexual violence, support survivors and create a consent culture.

### **Leading researchers and experts**

World-class experts continued to associate their names and bring their expertise to Ryerson. Faculties enhanced their teaching and research capacity through strategic hires, and since the last report, 16 leading Canadians were appointed distinguished visitors:

- Barry Avrich (2016) Distinguished Visiting Professor
- Anthony Bates (2016) Distinguished Visiting Professor
- Michael Brooks (2016) Executive in Residence
- Olivia Chow (2015) Distinguished Visiting Scholar
- Gail Cook Johnson (2015) Executive in Residence
- Alan Cross (2015) Distinguished Broadcaster in Residence
- Marci Ien (2015) Distinguished Visiting Professor
- Bernard Lucht (2015) Distinguished Visiting Professor
- Alok Mukherjee (2015) Distinguished Visiting Professor
- Deborah Newman (2015) Distinguished Visiting Scholar
- Steve Paikin (2015) Distinguished Visiting Professor
- Bonnie Patterson (2016) Distinguished Visiting Professor
- Stephen Pumple (2015) Distinguished Visiting Fellow
- Mario Silva (2015) Distinguished Visiting Professor
- Robert Silver (2016) Distinguished Visiting Professor
- Kathy Vey (2015) Rogers Visiting Journalist

## **II. FACULTY AND UNIT REPORTS (SUBMITTED TO THE PROVOST)**

### **A. Faculty of Arts**

After its tremendous enlargement over the past decade, the Faculty of Arts continues to grow. Full-time undergraduate enrollment in 2015-16 reached 4,070 students, representing a 57 per cent increase during the past five years. Graduate student enrolment rose to 550, a 33 per cent increase over the same period. Three new tenure-track faculty were hired over the past year, bringing the total faculty complement to 198.

#### **Goal 1. Enable student success through exceptional learning and engagement experiences**

##### **New degree**

The range of programs offered by Arts continues to expand. An important milestone is the fall 2016 launch of the Bachelor of Arts in Language and Intercultural Relations, which will be offered by the Department of Languages, Literatures and Cultures. This one-of-a-kind program in Canada will bring together language with skills and knowledge from culture, communication, negotiation and professional practice. It will give students the linguistic, cultural and leadership competencies to enter and thrive in a global workforce.

##### **Other new curriculum**

Other Arts-based curriculum available for the first time in 2015-16 included a new option in anthropology studies for Arts and Contemporary Studies students, a newly launched university-wide minor in global politics and development, and new liberal studies courses in anthropology, Arabic, Chinese, Spanish, the Holocaust and indigenous studies.

##### **Experiential learning**

Arts continued to develop and expand opportunities for experiential learning, both inside and outside the classroom to equip students with career-relevant skills and knowledge. More than 20 social science and humanities courses this year – a number which keeps on increasing and now includes representation from every Arts undergraduate program – engaged over 950 students in meaningful activities and projects that addressed community priorities. In addition, over 100 students volunteered their time to participate in Arts co-curricular programs – Volunteers Assisting Teachers and Students, Fostering, Empowering, Advocating Together for Children, and INVOLVE.

#### **Goal 2. Intensify scholarly research and creative activity**

Arts continued to contribute to Ryerson's increasingly vital research excellence. In 2015-16, a total of 73 researchers in the faculty had active research grants totalling close to \$16.5 million through their success in winning funding from national programs such as the Canadian Foundation for Innovation, the Canadian Institutes of Health Research, the Canada Research

Chairs program, NSERC, SSHRC and from provincial and US agencies, international research consortiums, the private sector and non-governmental organizations.

### **Goal 3. Foster innovation and social entrepreneurship**

The SocialVentures Zone continued to provide opportunities for students and alumni to move their ideas from initial conception to action. The zone has 22 active ventures with 70 registered zone participants. In January 2016, the second annual Social xChange inspired social innovation and social enterprise across Ryerson and the community at large. The xChange provided an opportunity for over 170 students and alumni from across six universities, including two international universities, to explore, initiate and develop their ideas for change. The xChange and other complementary engagement events brought together more than 450 students throughout the year serving as catalysts to spark social innovation while offering clear channels for continuing their development through Ryerson's Zone learning network. The SocialVentures Zone continues to work with more than 60 community partners.

### **Goal 4. Active partnerships at home and abroad**

#### **Development**

During 2015-16, Arts engaged in a number of initiatives that advanced philanthropic support for student awards, scholarships and research to enable student success. These initiatives included:

- the Campaign for Bright Futures, which was launched to foster a culture of philanthropy across Arts and to seek engagement from donors to support faculty initiatives
- a \$20K SocialVentures Award, established to support Faculty of Arts student initiatives in the Zone through charitable gifts from faculty, friends, DVP's and staff
- the first major gift of \$100,000 for the Psychology department, secured to launch the Institute for Stress and Wellbeing that is additionally supporting leading graduate student and faculty research initiatives
- three donor funded endowments for awards to an undergraduate student in Geographic Analysis and two graduate students in Public Policy and Administration
- new awards funded by partners such as the Canadian Centre for Policy Alternatives, Hicks Morley and Environics Analytics
- a partnership with DUCA Financial Services to sponsor the Social Innovation Summit/Social Exchange for two years with a \$30,000 contribution over two years

### **Goal 5. Create a flourishing and sustainable environment**

#### **Arts Eco Action Plan**

Through continued efforts by faculty, staff and students, the Arts Eco Action Plan flourished, with Arts becoming the first faculty at Ryerson to be recognized for sustainability actions with a certification by Sustainability Matters.

## **B. Faculty of Communication and Design**

Steps have been taken on all goals in the FCAD plan. Here are some highlights:

### **Goal 1. Ensure we are future-ready in the changing landscape of media and the creative industries**

- The interdisciplinary minor in design is in development and a Faculty task force associated with the minor has made great progress. FCAD is on track for a launch in the 2017-18 academic year and there are discussions with The Chang School on developing an associated certificate.
- The letters of intent for master's degrees in Creative Industries, Packaging and Interior Design, and for a new Faculty-based PhD program were prepared with June 2016 as the projected finish date for all of these projected programs. The Faculty is projecting to have full proposals for all these programs ready for 2017-18.
- Discussions have been ongoing with industry partners and university departments concerning a music industries undergraduate program. FCAD is building strong partnerships with the music industry and civic leaders, including Massey Hall and Roy Thomson Hall, the City of Toronto's Economic Development and Culture division and a wide cross section of industry players through The Music Den. The launch date for this program is still to be determined.
- Discussions are underway with the Faculty of Science and George Brown College for possible collaboration on an undergraduate program in gaming.
- An expansion of live events production in the Theatre School was developed for implementation in 2016-17.
- Plans have been moving forward for a Faculty-based fundraising campaign with a target of \$20 million over 5 years.

### **Goal 2. Become the creative and innovation hub for faculty, students and practitioners**

- This year's RUBIX event, in which FCAD faculty members showcase their research, was well received, with attendance between 100 and 150. The event is rapidly becoming infused in the Faculty culture.
- Plans for a new physical SRC hub have taken shape. This will be at the heart of the Creative Industries Resource Centre, with research clusters in each school in the Faculty to be connected with the Centre to promote interdisciplinarity.
- A vision is taking shape for the Creative Innovation Hub which will include three major research clusters:
  - The Consumer Experience cluster will prototype and commercialize impactful new technologies for media and content creation, consumption and analysis.
  - The Cultural Strategy cluster will provide analysis and insight into the production, growth and success of culture through the creative industries.

- The Digital Innovation cluster will look at new habits and trends in the consumption of media and will research emerging business models for the industry.
- Other notable accomplishments for 2015-16 include:
  - Hiring a Senior Research Associate for the Cultural Strategy Cluster,
  - Establishing the FCAD Creative Innovation Fund which internally funded 10 projects.

### **Goal 3. Make an impact in our fields and the broader community**

Through recruitment, communication strategies and future industry sponsorship opportunities, FCAD has been building its thought leadership as a long-term strategy.

- Outreach to existing and new international partners in leading creative centres has begun to take shape. Following the Dean's visit to the UK, which laid the groundwork for new partnerships and co-zoning, London South Bank University visited Ryerson in April 2016 to formalize a publicly announced research, teaching, and incubation partnership.
- Initiatives have been started in connection with the Ryerson Plan for Cultural Industries in Canada, with the creation of a cultural cluster. The Faculty's first major step was launching the Ryerson Music Den program at the Transmedia Zone this spring, with over 120 attendees from the community including civic leaders and industry experts. The Music Den will support aspiring innovators in the music industry. Areas include the development of:
  - new technologies to improve the creation, production, distribution, sale, licensing and enjoyment of music
  - new business models that grow or sustain artists, audiences and the industry as a whole
  - new businesses that promote diversity, equity, emerging artists, and interest groups
- The Faculty has developed a strategic communication plan that includes an assertive intake campaign, outreach to alumni, and strengthening collaboration with Ryerson's Communications, Government and Community Engagement office. The Faculty is working with this office to focus stories around specific scholars and their work, with research releases being written to send to various media outlets.
- A new Cultural Strategies Forum has been planned for June 2016. This event will bring together notable decision makers and influencers across the creative industries for discussion of Canada's needs in the area of cultural policies.
- FCAD partnered with NXNE (North by North East) to host their interactive conference on gaming, music, technology. The conference will occur in June 2016 at Ryerson.
- Dean Falzon hosted a panel discussion at the Toronto Board of Trade about the economic and cultural impact of film festivals, notably TIFF.

#### **Goal 4. Offer a distinct student experience in a world of choice**

Steps are being taken to develop more interdisciplinary and flexible curricular options. The partnership with the Career Centre, combined with increases in productivity from the Centre for Communicating Knowledge and RTA productions have been positive steps toward increasing our graduates' share of the job market. These initiatives have provided our students a space to practice their skill sets within their professional environments, with support, guidance and very importantly, with pay. The base funding received for the Faculty's second counselor and the formation of an FCAD Mental Health task force has sent a strong message about FCAD's commitment to student mental health.

## **C. Faculty of Community Services**

Significant progress was achieved by the Faculty of Community Services on its four goals in 2015-16.

### **Goal 1. Teaching, learning and student experience.**

The most progress made has been in the area of curriculum:

- The School of Child and Youth Care will be launching a graduate program in child and youth care with its first intake in fall 2016. The school also redeveloped its undergraduate curriculum and has become the home of the minor in social innovation, offering with three new courses for students across the university.
- The School of Disability Studies has developed several new courses to meet the evolving needs of the field.
- The School of Early Childhood Studies launched a concurrent BA/BEd program in partnership with York University, the first of its kind in Canada.
- The Midwifery Education Program (MEP) is in the final stages of curriculum revision to reflect the expanded scope of midwifery practice and the new College of Midwives standards of practice. These standards have been integrated into all MEP courses. An environmental scan to prepare for the development of a midwifery graduate program and a survey of Canadian midwives regarding graduate education are underway.
- The Daphne Cockwell School of Nursing is engaging all faculty across the three partner sites in the redevelopment of the curriculum to prepare nurses for 2020 and beyond. The School created a pilot program to bridging registered practical nurses who are geographically scattered across southern Ontario for fully online learning. The graduate program in nursing is preparing for its periodic program review.
- The School of Nutrition's MHSc program review report was completed. The school will launch a new PMDip in Dietetics with North York General Hospital in September 2016.
- The School of Social Work successfully launched a three year program mainly for graduates from community colleges.

The Faculty is reaching out to enhance student experiences locally and globally. For example:

- Between 50 and 60 students from the School of Early Childhood Education and Social Work have been engaging in international placements every year. In the School of Child and Youth Care, more students are taking up international placement opportunities and students are now completing field placements in all continents.
- The School of Disability Studies has invited a number of international guests to its Summer Institute and is hosting an international student from Brazil.
- The Daphne Cockwell School of Nursing has secured international and intranational innovative clinical placements/practicums for graduate and undergraduate students.
- The School of Urban and Regional Planning has added an exchange program with Cardiff University in the United Kingdom.

The FCS teaching chair was engaged in individual mentoring and Faculty-wide initiatives on classroom management, assignment design, teaching standards, and course and exam design. Faculty-wide events included panels on arts-informed teaching and universal learning design and a faculty workshop on collaborative writing. A short introductory video message and Twitter account were created to promote the chair's role.

The faculty-wide initiatives connected with writing skills, interprofessional education and social innovation continued to contribute to FCS students' success.

- The Faculty's Interprofessional Education team held ten IPE Matters! Workshops attended by approximately 235 students.
- During the past year, approximately 700 undergraduate students in eight FCS schools were engaged in the Writing Skills Initiative.
- The Dean's Office launched a brand identity, website redesign and photography initiative to support recruitment strategies over the next three years.

## **Goal 2. Strengthening SRC intensity, excellence and impact.**

There is a steady increase in SRC activities in the Faculty. This year 85 funding applications were submitted, of which 32 were awarded grants and seven were declined. The Faculty is waiting for the results of 46 applications. This year a member of the School of Social Work received the first SSHRC partnership grant for Ryerson, and three of the four applications from the Faculty for partnership development grants were successful. The Faculty has been successful with CIHR and IDRC as well. Six FCS faculty members each have over one million dollars in research funding. The numbers of Faculty publications and creative activities were slightly lower than that in 2013-14, but higher than all other years. The FCS Knowledge Translation Portal and its Research Insights publication attracted a higher number of visitors yearly as it has done for the past several years.

## **Goal 3. Advance social innovation.**

- The Faculty convened a two-day Social Innovation Conference in March 2016. The purpose was to foster innovative thinking and action in order to enhance community involvement in the resettlement of refugees and was intended to incite meaningful social change through inclusive participation and ongoing discussion. Over 90 community partners, students and faculty attended each day.
- The Faculty's social innovation team held approximately 10 Transformation Café sessions attended by a total of 250 students
- The inaugural John C. Eaton Chair in Social Innovation and Entrepreneurship held a series of leadership workshops on the topic of community partnership.

## **Goal 4. Civic engagement and city building**

The Faculty continues to engage in civic engagement and city building. For example:

- The School of Social Work held its inaugural Akua Benjamin public lecture and formed the Social Work Alumni Association
- Urban and Regional Planning faculty members were involved in the development and administration of the Centre for Urban Research and Land Development. The Centre's policy seminars saw the participation of 274 students over the past year.
- Ryerson sponsored Tangled Art + Disability's Panamania show *PUSH! Real Athletes. Real Stories. Real Theatre*, positioning Ryerson and the School of Disability Studies as thought leaders in this important area. Workshops and rehearsals at the School of Disabilities Studies involved Ryerson students and faculty.
- The City Building Institute held over 15 events last year for Ryerson students and the broader public. The Institute's executive director made frequent media appearances to discuss current city issues. The Institute also has a significant social media presence.

## **D. Faculty of Engineering and Architectural Science**

In August 2014 FEAS welcomed Tom Duever as new Dean. Since then he has led the Faculty through a year and a half long strategic planning process that included the following stages ending in April 2016: 1) a self-study period, 2) completion of a draft plan, 3) external assessment, and 4) sharing the plan online via town halls.

The 2016 calendar year represents the first focused year of effort on the Faculty's goals, with the following target milestones: in May units will provide the 2016-17 implementation proposals, from June to July they will receive their 2016-2017 budget allocation, in October they will be provided with plan reporting templates, in November units will provide their final reports, and in January 2017 the plan's first-year report will be published.

Though 2015-16 precedes the formal start of the Faculty's plan, significant progress was made:

### **Goal 1. Maintain and enhance development of societally relevant undergraduate programs to meet societal need**

- An undergraduate committee was established. This committee is chaired by the Associate Dean Undergraduate Studies and Student Affairs and has representation from all departments as well as the First Year Engineering office. Its role is to implement the strategies and work towards the goals identified in the strategic plan related to undergraduate programs; to act as a forum for discussing and approving changes to undergraduate programs and curriculum at the Faculty level following departmental approval; and to serve as a means for sharing best practices among FEAS departments.
- A pilot student study space in the George Vari building was installed and met with considerable success. The Faculty is working with Campus Facilities and Sustainability to design and install additional study benches on the building's third and fourth floors.
- A new position of assistant director was added to the First Year Engineering Office, with the aim to assist with student advisement given increasing enrollments in the Faculty.
- A new fee structure to support improved and expanded co-ops and co-operative internship programs was approved and is being implemented. The intent is to use the funds to hire additional resources to assist students in finding co-op and co-operative internship placements, with the long-term goal of significantly increasing the number of students who participate in such placements.
- A leadership institute proposal was developed to address leadership issues specific to FEAS students.

### **Goal 2. Strengthen, enhance graduate programs, focusing on outreach, recruitment and new program development**

- New graduate programs were approved in engineering innovation and entrepreneurship (MEIE) and in biomedical engineering (MEng, MAsc and PhD) with a launch in fall 2016.

- A graduate studies committee was established, the mandate of which parallels in a graduate studies context the mandate of the new undergraduate studies committee.
- A new associate dean position with responsibility for graduate studies was created.

### **Goal 3. Increase scholarly research and creative activity (SRC) intensity and impact**

- Two new Tier 2 Canada Research Chairs were successfully nominated.
- One Tier 2 Canada Research Chair application was submitted.
- Two FEAS researchers were awarded prestigious Early Researcher Awards from Ontario's ministry of research and innovation.
- Seven biomedical engineering researchers from FEAS housed their lab operations in the new iBEST facility opened in January 2016.
- The Biomedical Zone was opened as a means to foster innovation and entrepreneurship opportunities for biomedical engineering students and researchers. Currently 26 students are enrolled in the zone
- Five large research partnership grants, funded through NSERC CRD and OCE, were awarded in 2016, covering the areas of aerospace engineering, robotics, energy, sensors and data analytics.
- The undergraduate research experience (URE) program has been re-modeled and targeted to third year undergraduate students in FEAS.
- FEAS cluster developments include a new Ryerson Institute for Infrastructure Innovation (RIII) Advisory Board and the announcement of a \$5 million NSERC Energy Storage Technology (NEST) Network which is supported through an NSERC Strategic Networks Grant. The NEST Network is a pan-Canadian research network in the area of energy storage led by Ryerson University and coordinated by the Centre for Urban Energy. It is the first network grant awarded to Ryerson.
- The total of external research grants for 2015-2016 up to the end of January 2016 was \$9.5 million with 91 faculty members holding active external research grants.

### **Goal 4. Foster innovation, entrepreneurship, partnerships and increase reputation and awareness**

- The Esch Awards is in its third year and has distributed 147 student awards to innovative student ideas at different stages of maturity. There are currently 12 highly mature start-up teams who have raised over \$4M in capital and created over 100 new jobs. Several of these startups have applied for and been granted patents or have patents pending on their ideas.
- The iBoost Zone, an innovation acceleration platform geared to helping technology entrepreneurs, was launched in 2015. In the first term of operation the Zone attracted over 100 interested students.
- The Centre for Engineering Innovation and Entrepreneurship (CEIE) hosted numerous workshops and hackathons on themes such as Re-Engineering Fashion, Sports Technology, and Internet of Things which have attracted over 5000 student participants.

- The Director of the Center for Engineering Innovation and Entrepreneurship (CEIE) was asked to teach finance and consulting executives about creating innovative corporate cultures as part of the Toronto Regional Board of Trade's Executive Education Series.
- The Director of iBoost has cultivated a large and growing network to key global players in the entrepreneurship and innovation space including the Kauffman Fellows, Stanford and Cambridge alumni networks, and recently helped open an office in Palo Alto, to provide Canadian entrepreneurs access to the valley resources.

**Goal 5. Embrace diversity, inclusiveness, advancement and augment community engagement and connectivity**

- The fourth floor of the Architecture building will be renovated to enhance learning and teaching. This \$1.2 million project, funded by both private support and Ryerson University contributions, is aimed at providing students with modern studio space in which to carry out their work. The David E. Handley studio will open in September 2016.
- The Esch Foundation contributed over \$1 million to support the Esch Awards program run by the Center for Engineering Innovation and Entrepreneurship (CEIE), which enables undergraduate and graduate students in FEAS to pursue creating a business.
- The TMX Group made a significant gift to support research projects in big data applications in the financial industry.
- New donors, including faculty members, established student awards.
- Over the past two years, the Women in Engineering program has more than doubled the number of professional development and social events targeted at current female undergraduate engineering students offering two to three per month throughout the academic year. This expansion has increased the sense of community and enabled the students to expand both their professional personal networks.
- In collaboration with the Tri-Mentoring Program, the Engineering Enrichment and Outreach Office launched the university's first Women in Engineering mentoring initiative partnering first-year female engineering students with upper-year female engineering students.
- The Outreach office designed and piloted the "Pitch Black" Grade 9 science program to 27 high school classrooms across the GTA reaching over 1,200 high school students. This program placed current Ryerson Engineering students in the Grade 9 Science classrooms to instruct a hands-on electric circuits activity coupled with facilitating an open discussion to introduce to engineering as a career option. The Pitch Black program has since expanded to 66 high school classrooms in 2016 with a projected reach of 2,000.
- The Faculty has set a target of ensuring 30 per cent of the engineering student population is comprised of female students by 2020.

## **E. Faculty of Science**

2015-16 represented FOS's fourth year as an independent faculty since its inception in July 2012. Over these four years there has been an increase in enrollment and expansion in the number of programs offered. Students in the Faculty's newest undergraduate programs (Financial Mathematics and Biomedical Science, both launched in 2013) continue to move through the curriculum with the first graduates from the new programs anticipated in June 2017. Graduate programming continues to develop and in 2015-16, the first master's graduate from the Biomedical Physics program with the Commission on Accreditation of Medical Physics Education Programs (CAMPEP) graduated. The first PhD students in Computer Science also completed their programs. Meanwhile a new PhD in Mathematical Modelling and Methods was approved to be launched in 2016. This achievement means that FOS will now have undergraduate, masters and doctoral programs in all departments.

Significant progress was made with respect to the Faculty's four goals.

### **Goal 1. Continue to develop student excellence and enhance connectivity**

The First Year and Common Science Office has continued to provide academic support to students. This, in combination with the new facilities in the Student Learning Centre, the highly helpful and professional staff in the Student Learning Support team and Math Support, and the collaboration from FOS faculty, have made possible the creation and delivery of academic support initiatives to first year students. The results are already in evidence with a rising proportion of FOS's undergraduate students having a clear standing after their initial year in their program, and average first year retention undergoing a significant increase.

The Faculty's priority for the next five years is to build on its current strengths in the area of outreach and engagement. A new director position for the office of Science Communication Outreach and Public Engagement has been created and the director has initiated a review and strategic planning aimed at developing an accessible centre of science outreach and communication that promotes STEM literacy across Canada, facilitating a more scientifically engaged nation and promoting the principle that being science literate is empowering.

The FOS community continued to engage in redesigning, updating, enhancing and innovating curriculum which will result in improved undergraduate student experience, success and retention. In 2015-16 new laboratory courses with innovative teaching approaches were introduced. For instance the Physics department developed a reality education platform for a gesture recognition system in classrooms it uses. The department also implemented the first phase of innovative research-informed pedagogies supported by educational technologies. The Computer Science department developed undergraduate software engineering program, which received approval at Senate.

At the graduate student level student success was represented in a number of ways, including, for example, the award of a Vanier Canada graduate scholarship – one of the most prestigious in Canada.

Additional activities in support of experiential learning and career development for undergraduates include the expansion of the wildly popular and successful RySciMatch, a non-credit certificate course for students interested in acquiring research experience, and a series of alumni events, in which Ryerson graduates from a variety of programs returned to campus to provide feedback, advice and networking opportunities to science students. The development of a Faculty of Science Zone has continued with a number of pilot projects to test models of implementation with structure and implementation plan now nearing completion and an anticipated launch in fall 2016.

### **Goal 2. Continue to build a Faculty culture of scholarly, research and creativity activity**

The Science Research and Innovation Office (SRiO) continued to use an evidence-based approach to promote and support research activities within the Faculty. Research highlights in 2015-16 included Early Researcher Awards (prestigious awards administered by the province) to two faculty members, the graduation of the first PhD student in a FOS graduate program, the full accreditation of the Biomedical Physics graduate program from the Commission on Accreditation of Medical Physics Educational Programs (CAMPEP), the agreement between St. Michael's Hospital and Ryerson University for the creation of the iBEST institute with the participation of several FOS faculty members, the formation of the Ryerson Urban Water Centre which brings together a multi-disciplinary collective of researchers from across the university with a shared interest in promoting a healthy urban water cycle and The Institute for Privacy and Big Data led by Dr. Ann Cavoukian. Challenges around space and infrastructure support for research, particularly in the laboratory sciences, continued to be a major impediment to growth and recruitment and a variety of short-term and long-term strategies are being actively pursued to address the issue.

The Faculty continued to provide a home base for two multidisciplinary research entities with links across the university: the Privacy and Big Data Institute and the Ryerson Urban Water collective of experts.

### **Goal 3. Intensify innovation and enhance external collaboration**

In 2015-16 FOS piloted its own version of Zone learning with the Science Innovation Zone (SIZ). In the project's inaugural year 23 science students presented their ideas for new processes, products or technologies. The SIZ pilot will continue to evolve as the Faculty identifies barriers and opportunities.

The Institute for Biomedical Engineering, Science and Technology (iBEST), a partnership between Ryerson University and St. Michael's Hospital, became a physical reality. Five physics professors will now have dedicated laboratory research space in the Keenan Research Centre at

St. Michael's Hospital, as part of the iBEST. In addition Ryerson University has leased new space in the MaRS West Tower, which will be fitted out to accommodate biomedical researchers in the Department of Chemistry and Biology.

**Goal 4. Augment community engagement, entrepreneurship and escalate visibility**

The Faculty hired a web manager with added responsibility for communications more generally. This individual has been updating all aspects of FOS's social media and web-presence across all platforms to ensure accurate and timely communications are happening within and beyond the Faculty.

FOS and FEAS were academic partners in the *MythBusters: The Explosive Exhibition* at the Ontario Science Centre. Also Ryerson participated as the only Canadian post-secondary institution with student research proposals for experiments to be carried out aboard the International Space Station. Students formed a new Ryerson student society while the Faculty provided support for student engagement in various conferences. Science students continue to organize in support of various initiatives, including the Ryerson Science Society, the Women in Mathematics group, the Women in Computer Science group, the Undergraduate Women in Science group and Women in Science at Ryerson.

## **F. Ted Rogers School of Management**

In 2015-16, significant progress was made on a range of the Faculty's goals.

### **Goal 1. To expand co-operative education options to all undergraduate academic programs**

TRSM launched new co-op options in the undergraduate programs in the School of Accounting and Finance, the School of Hospitality and Tourism Management and the School of Retail Management.

### **Goals 3 and 4. To create and host at least two new zones where students can explore complex problems and to provide Zone learning at Ryerson with foundational business modules offered by TRSM**

As of March 2016 TRSM had created three pilot Zones – the Zone Learning Analytics School, the Sport Innovation Hub (SPIN) and the Ryerson Global Innovation Challenge (RGIC) project. These initiatives provide students with experiential learning opportunities, both in Canada and abroad. They focus on much-needed core business skills, including the use of cutting-edge technology to analyze data and assist in the development of critical thinking skills.

Additionally, the development and broadening of TRSM's Start-Up School provided fundamental entrepreneurial education. The Start-Up School incorporates the best of both business and academia, providing skills training and real-world scenario-based learning for Zone students across the Ryerson campus. Currently, the feasibility of an online offering is being assessed, for delivery beginning in fall 2016.

### **Goals 12, 13 and 14. To become a globally recognized MBA program, to develop professional masters diplomas (PMDips) to supplement and enhance MBA offerings and to relaunch the MMSc to provide all eligible faculty opportunity to supervise graduate students**

The Master of Science in Management program was renamed and re-launched for 2015-16, with 19 students enrolled. The one year increase in applications between 2015 and 2016 was significant, from 7 to 164. The Faculty is also currently moving forward with a search for a program director for the newly relaunched program. Thesis-based graduate programs are an essential part of the strategy to dramatically improve SRC intensity in TRSM.

Regarding the development of Professional Masters Diplomas, one PMDip – Enterprise Information Security, Privacy and Data Protection – was launched in fall 2015, and three more were approved by Senate: Canadian Business, Financial Analysis and Finance and Social Innovation.

In 2015, the Ryerson MBA was ranked in the Top 100 MBA programs in *The Economist* magazine, and in 2016 the Ryerson MBA team won the People's Choice Award in the Real Vision Investment Case Study Competition, hosted by *The Economist*. These prestigious

rankings are instrumental in cementing the Ryerson MBA as a globally recognized program, and in building the reputation of both the MBA and TRSM as a whole.

**Goal 18. To develop a comprehensive Faculty Research Plan**

The goal to produce a TRSM Research Plan was achieved, with the plan being passed at TRSM's Faculty Council in November 2015. This is an important step in increasing SRC activities in TRSM, as well as in fostering a vibrant research culture. Additionally, the adoption and growth of the TRSM research mentors (now in its second year) has seen a focus on building reputation and research quality with the help of peer mentoring.

**Goal 19. To develop at least two comprehensive international partner agreements**

In recent years, TRSM has embarked on two international partnerships focused on graduate students and research, with Hong Kong Polytechnic University and Fudan University. In early 2016 a Memorandum of Understanding was also signed with the Hong Kong Science and Technology Parks. January 2016 marked the successful inaugural research conference in Hong Kong with joint research presentations between faculty at Hong Kong Polytechnic University and TRSM.

**Goal 21. To become a hub for diaspora discussions on business and society**

Two conferences on diaspora-related business topics were held in 2015-16: the TRSM Business Conference *The Power of the Diaspora Networks*, and 2) the eighth annual conference of the Academy of Innovation and Entrepreneurship *Building an Inclusive Entrepreneurship Ecosystem*.

**Goal 23. To develop strong advisory councils for all TRSM schools and a Dean's Council**

Development of advisory councils for all TRSM schools and departments as well as the MBA program is underway. This includes the renewal of existing councils and the creation of councils for the six School of Business Management majors. The process has followed the best practice established with the creation of the Dean's Council, where expertise and discipline/industry representation have been strategized and engaged. It has been very rewarding to see the level of external interest and commitment to serving on the advisory councils.

**Goal 24. To build a sustainable executive education model**

In 2015 TRSM's Executive Education program engaged in projects with major corporate clients such as Rogers, Walmart and foreign clients from Brazil. It continues to develop its relationship with the Toronto Region Board of Trade as an opportunity to leverage the membership into Executive Education programs. This involved serving as the lead sponsor on a variety of Toronto Region Board of Trade event series and key thought leadership summits. TRSM provides executive education sessions throughout the year to TRBOT members. Ryerson staff and faculty

have access to the many events at the Board and students are able to attend sessions free of charge.

**Goal 31. We will develop a strategic marketing and communications plan for TRSM brand development by 2016.**

In 2015, TRSM undertook a comprehensive bench-marking study for brand and reputation health, resulting in a brand review and the hiring of an external agency to strategize a new brand platform, brand narrative and brand identity for TRSM, including the MBA. Broad consultation occurred with students and faculty, and a brand identity sub-committee was created with the Dean's Advisory Council, to tap into the expertise and experience of the many influential business leaders on the council. The brand is set to launch in mid-2016.

## **G. The G. Raymond Chang School of Continuing Education**

The Chang School academic plan comprises the activities of nearly a dozen separate units: Digital Education Strategies (DES), Spanning the Gaps (STG), Programs for 50+, Development, Gateway, and the core Faculty program development units of Arts, Communication and Design, Community Services, Engineering/Architecture, Science and TRSM/Business.

The synergies and collaboration among these various units contribute to making The Chang School an ecosystem of innovation as envisioned in the university's academic plan. Notable examples include the DES unit's role in developing online programming for the core Faculty units and the contribution of the Faculty-core units to the Gateway program and its communities of clients. Overall, The Chang School's continuing education capacity enables all faculties, schools and departments within Ryerson to further this important element in the University's city-building reputation, as envisioned in *Our Time to Lead*.

### **Goal 1. Continue to develop a student-centric environment that engages and supports students and alumni**

The ESL Foundation Program is an important initiative aimed at promoting accessibility to a university education. Currently in its third year, it has a cohort of 82 students, with 100 to 120 expected in the fall of 2016. With a very high student satisfaction rate (90%), the program is currently exploring significant increases in enrolment in the next five years.

The DES unit completed several activities specifically relating to accessible and experiential learning. It created coaching-based learning modules for the Experiential Learning Exchange, a workshop on professional web accessibility auditing for Enabling Change in Ontario, and a customized training program in instructional design principles for Pearson.

New delivery methods are an important way of enhancing accessibility for students. Last year saw the successful delivery of intensive spring/summer certificates in data analytics, computer security, film school, and photography. Students and alumni were engaged through opportunities to connect with sector leaders, and a pilot of an industry outreach program was completed with Ryerson's Career Centre. The Chang School counselling staff, working on a go-forward strategy, launched two workshops on social media and personal branding.

### **Goal 2. Actively engage CE instructors and staff through innovation and learning excellence opportunities**

The Chang School continues to build and promote an equitable, diverse, inclusive and engaging working environment. Mental health and well-being training was rolled out with Human Resources and the Office of Vice Provost, Students. The School also engaged a working group on Equity Diversity and Inclusion with a wide representation of staff, while EDI questions were included in instructor and student surveys. For the first time an Administrators' Guide for Course Development and Delivery was created. This guide was also provided as an eLearning

module by DES for academic coordinators and program directors. In addition initiatives were devised through Program Support to identify process improvement for instructional observation, e-Hire records management, and assessment rubrics. An Instructor Orientation and Support Team was formed in the Ryerson English as a Second Language Foundation Program. In collaboration with the Learning and Teaching Office (LTO), pedagogically dynamic teaching strategies were implemented in a range of the School's courses. As a strategy to build the continuing education teaching community, a range of experiential learning events were held.

### **Goal 3. Continue to improve internal systems and manage budget to optimize fiscal contribution**

Deloitte has been engaged as a third party vendor to develop an RFP for a new website for The Chang School. The RFP has been released and the School is in the process of vendor selection and engagement, with an expected website launch in winter 2017.

As part of the School's ongoing review of operational processes to support service excellence for its internal and external clients, there has been an improvement in the alignment and integration of internal processes related to budget preparation, course scheduling, calendar preparation, and Chang School Council scheduling. The operational functions associated with new e-Hire system, together with realigned Program Support structure and staffing have been reassessed. Eight certificates have been discontinued.

Financial performance has been very positive and budget targets have been met.

### **Goal 4. Support CNED growth through relevant academic and professional programs with industry connections**

Curriculum updates were completed in consultation with professional and industry associations, including the Certificate in Financial Planning with the Financial Planning Standards Council; the Certificate in Accounting and Finance with the Chartered Professional Accountants; the Certificate in Health Informatics with the Canadian Health Information Management Association; the Certificate in Data Analytics, Big Data, and Predictive Analytics with the Institute for Operations Research and the Management Sciences; the Advanced Certificate in Architecture with the Association of Architectural Technologists of Ontario; and the Certificate in Project Management with the Project Management Institute.

All certificate offerings were reviewed with a view to proposing the revision of certificate graduation requirements through an amendment of Senate Policy 76.

A Certificate in Digital Art Production was launched, while over 12 certificates underwent significant revisions, over 10 certificate reviews were in progress, 11 course series were introduced, and three certificates underwent curriculum updates in consultation with

professional and industry associations. New delivery models are being considered for various certificates, course series and workshops.

### **Goal 5. Promote innovative, interactive and accessible digital learning opportunities**

A total of 18 new online courses were created while 20 existing online courses were redeveloped. To provide ongoing support to online instructors, three professional development events were offered.

All future courses developed by the Digital Education Strategies unit will meet AODA guidelines, with web accessibility Level AA compliance. The School's own accessibility guidelines were updated and shared with staff, instructors and subject matter experts (SMEs) and all DES's existing courses are in the process of being retrofitted to meet AODA guidelines.

Lake Devo, which was designed by the Digital Education Strategies unit to support online role-play activity in an educational context, was updated to meet AODA guidelines. The key features in the Lake Devo web-based role-play environment that allow blind students, using a screen reader, to fully participate in creating and presenting online role-play scenarios were reviewed, including the Character Editor, the Script Editor, and the Movie Player.

### **Goal 6. Grow our presence through outreach, partnerships and research to support profile as a city builder**

The School continued to support Aboriginal, first generation students, students with disabilities, internationally trained individuals (ITIs) and older adults. For example, as part of its support for Aboriginal students through closed enrolments for sections of the First Nations Technical Institute (FNTI) part-time degree program, a one-day intensive course was developed on managing academic challenges as a mature learner and first generation student. The Spanning the Gaps unit completed development and launched a new course CYSG 100: University Success Strategies, while significantly increasing the enrolment of STG program participants.

The Spanning the Gaps unit designed and develop an educational initiative to support the Canadian Armed Forces. Initial research was carried out, canvassing military service programs in Canada, especially the University of Manitoba's Extended Education unit. The result has been the development of a communications strategy to create awareness and interest for Ryerson's bridging programs and provide academic support and advice for the Canadian Forces members and veterans. Phase One of this strategy includes the creation of a dedicated landing page with all the information about programming available and a contact person within the Spanning the Gaps team which will launch by fall 2016.

Gateway partnered with the following three organizations to deliver programming to internationally educated individuals in 2015: YMCA Employment & Newcomer Services of Niagara, the Niagara Catholic District School Board, and Access I.T. Connections. The Internationally Trained Medical Doctors (ITMD) Bridging Program is for non-licensed

employment preparation in the health sector. This program represents a pilot that has run successfully for two years and now has been integrated into Gateway's regular programming.

Programs for 50+ worked with Sheridan College on an SSHRC research project "Investigating Lifelong Learning Pathways: Choice and Opportunity." Its other partnerships included one with Simon Fraser University on AGEWELL (NCE), an initiative to enhance aging with technology, and Toronto Long Term Care Homes and Services to enhance the Caring Clown program and provide active volunteers for their ten Toronto homes.

The School fostered opportunities for research to enhance its reputation as a thought leader in education. It hosted ChangSchoolTalks 2015 to raise its profile as a leader in digital and continuing education and "Cultivating the Art of Entrepreneurial Mentorship – An Online Journey," the 8th Annual Conference for the Academy of Innovation and Entrepreneurship in August 2015. In addition the School received the third place bronze award for QS Reimagine Education and the ICT Tools for Learning and Teaching Award for the most innovative pedagogical approach to learning through an ICT tool.

The School entered two health care related partnerships: one with Sunnybrook Hospital on the new regulation concerning patient experience with the development and implementation of a course series titled Leading and Planning for Patient Experience, the other with Sick Kids Hospital to re-develop a course on pediatric health assessment as professional development training for nurses.

## **H. Yeates School of Graduate Studies**

Graduate education continues to build momentum and contribute to Ryerson's overall goal of becoming a leading comprehensive innovation university. YSGS made great strides in 2015-16 in engaging students, connecting with stakeholders and supporting academic success. The highlights are:

### **Goal 1. Building a community of culture and inquiry**

#### **Community building**

A major emphasis of the school is to create sustainable and scalable opportunities for graduate students to come together to co-create a sense of community that is relevant to them, and meaningfully extends beyond development opportunities in their respective programs of study. Two GRADCafé events during the past year focused on answering the question: What is the compelling picture of graduate culture at Ryerson that we have yet to embrace or create? A GRADTalks series featured a fall and winter panel discussion: "Secrets of a Successful Student-Supervisor Relationship" and "Beyond the PhD: Career Pathways for Graduate Success". The school worked to make the GRADSpace at 111 Gerrard more usable by updating and cleaning as well as reassigning office spaces. The fall GRADSpace open house was attended by close to 100 students.

#### **Student engagement**

Various initiatives engaged graduate students in sharing narratives that illustrate and showcase the talent and diversity of their community and contributions to Ryerson and beyond. These included:

- The GRAD Video Contest, which featured 60-second videos about students' unique journeys as graduate students at Ryerson looking at: Who are you? Where did you come from? How did you get here? Where are you headed?
- The GRAD 6-Word Contest, in which over 270 graduate students submitted six-word responses to the question: What are the best things about being a grad student at Ryerson?
- The Imagining Canada's Future initiative involved roundtable discussions that brought together Ryerson and York University graduate students to answer the question, "What knowledge will Canada need to thrive in an interconnected, evolving global landscape?" The participant's answers were brought together in an 11-minute documentary that captured insights and ideas from diversity, technology, interconnectedness, and innovative thinking. The documentary was shown at a very well attended event for graduate students.
- The Three Minute Thesis Competition, which showcases and celebrates the richness and diversity of graduate student research. This year's event showcased students from 11 graduate programs who were able to present their research and its impact in an accessible and compelling way in just three minutes. The Ryerson champion went on to place second in the Provincial 3MT and is moving on to the national championships.

## **Celebrating student success**

Graduate student success was communicated through internal and external vehicles:

- The second instalment of Year in Review, the print and digital publication distributed to key internal stakeholders to raise awareness and build support for YSGS, was published in 2015 and this year's instalment is in the works.
- The Admissions Viewbook has been developed and is available in Graduate Admissions for recruitment events.
- The e-newsletter GRADNews has been published once every two months, with an evaluation currently taking place concerning the possibility of moving to a publication schedule of once every two weeks.
- The School maintained its YouTube channel, which highlights remarkable students and graduates as well as YSGS events and student competitions. The School is currently looking into the possibility of creating a presence on Facebook, Twitter and Instagram.

## **Alumni engagement**

YSGS is developing strategies in conjunction with the alumni office, faculties, departments, schools and programs for establishing and engaging graduate alumni associations. The School and three of its doctoral programs have begun to participate in the national pilot known as the TRaCE Project which tracks, reports on and engages with PhD alumni from the humanities.

## **Goal 2. Elevating excellence in graduate education**

### **New programs and program reviews**

Five new graduate programs (Data Science and Analytics MSc; Child and Youth Care MA; Mathematical Modelling and Methods PhD; Biomedical Engineering PhD, MAsc, and MEng; and Master of Engineering Innovation and Entrepreneurship (MEIE)) were approved by Senate, Quality Council and MTCU for a fall 2016 launch. New programs that are currently moving through the approval process include an MA of Criminology, a Master of Community Health Services Management (MCHSM), and several Professional Master's Diplomas (PMDips). YSGS continues to coordinate and support the periodic program reviews of graduate programs. Two of these review successfully passed through Senate this academic year and an additional six have begun the approvals process.

### **Professional development and innovation**

The Future Smart program, designed to help graduate students develop and enhance in-demand professional skills, saw higher enrolment this year, and there was a greater turnout at program events. This included seven workshops offered in collaboration with MITACs during the past year.

The School began an ongoing conversation regarding career paths for doctoral students outside of the academy with a GRADTalks panel discussion in the winter term of 2016. Additionally the

School is working on a pilot in the Faculty of Science, in collaboration with the Career Centre, to develop an event specific to PhD students in science on a full spectrum of career opportunities for graduates.

In terms of innovation, individual graduate programs have worked with, supported, and benefited from the learning zones across campus. This has allowed for complementary, supplemental, and enhanced learning opportunities for students in these programs.

### **Student funding**

For the 2015-2016 academic year, Ryerson students held a total of 228 external scholarships including 140 Ontario Graduate, 12 Ontario Trillium, 31 SSHRC Master's, 17 SSHRC Doctoral, one NSERC Master's, six NSERC Doctoral, four Vanier, six CIHR Master's, and 13 CIHR Doctoral Scholarships. An open dialogue has begun about ways in which to improve and implement mechanisms for enhancing time-to-completion and rate of completion of graduate students through supervision, intervention and progress reports.

### **Goal 3. Attracting and retaining outstanding graduate student talent**

#### **Recruitment**

YSGS continues to develop and expand its domestic and international recruitment. In conjunction with Ryerson's communications arm, the School rolled out a successful marketing, communications and recruitment plan. This involved a two-phase media campaign with a significant use of social media. These provided the opportunity for heavy advertising of the open houses run by Graduate Admissions as well as those run by individual graduate programs. There was also YSGS representation at the Ryerson Career Centre's further education fairs, the Ontario University Fair, and Ryerson's open houses.

#### **Student awards**

YSGS has been actively negotiating for more funding for excellence-based student scholarships. With this year's addition of a graduate scholarships assistant, the School is better able to support students in their search and application for scholarships and awards.

### **Goal 4. Leading academic and administrative support and services**

The School continues to work with graduate programs to support their needs. With this year's appointment of associate deans with graduate responsibilities in each faculty, communication with individual faculties and departments has been enhanced, improving overall program delivery. Policy development has also been streamlined now that clear lines of jurisdiction have been demarcated. The newly appointed associate deans have been playing an important role in reviewing graduate-specific policies. In addition, the School has representatives on Senate's Academic Policy Review Committee.

## **I. Ryerson University Library and Archives**

Given that RULA works in a very integrated fashion, it has been able to move forward on several of its goals. However, the sharp decline in the Canadian dollar coupled with publisher inflation of more than 5 per cent and the upward trajectory of Ryerson enrolment and research revenue has hampered its ability to develop and even sustain the collection at the level expected of a comprehensive university.

### **Goal 1. Improve the Library's facilities to create healthy, configurable and flexible learning spaces**

In the first year of the Student Learning Centre operation, RULA's new initiative, the Digital Media Experience Lab, has proved to be highly successful and growing rapidly. Not only is it attracting many students and faculty partners, as well as recognition beyond Ryerson, the DME Lab is now named for Isaac Olowolafe Jr., who donated funds for instructional programming and technology refreshment. Work has begun on the next phase of space development, namely the renovation of the third and fourth floors of the Library building to create the Archives & Special Collections Research Centre (ASCRC), including a digitization suite in collaboration with the Centre for Digital Humanities, and a centralized workspace for the Library Information Technology Services (LITS) department.

Work on the research centre is well underway with architects engaged and timelines developed. For greater efficiencies and economies two renovation projects have been combined under one project charter. The LITS collaboration space will underline the Library's and SLC's programmatic relationship. The Geospatial Map & Data Centre expansion has proved very popular. The Research Help area at the SLC Bridge is in high demand, but noise transference from the amphitheatre has been a problem. The area will be glassed in during 2016.

### **Goal 2. Develop the Library's web presence to enhance the discoverability of our collections and services**

Under its e-learning goal RULA has developed a strong relationship with the Director of E-learning to offer support and highlight its projects. RULA shall further establish its services in 2016. The division has enhanced its online modules (RU Search) with videos, text and activities to appeal to the various learning styles of students. Externally RULA is an active member of the e-learning in libraries group and shares its expertise with other Ontario universities.

### **Goal 5. Strengthen collaboration with Ryerson partners to provide holistic student support**

Collaboration is the fundamental ethos of RULA's strategic plan and much has been achieved in this area. An Aboriginal Research Portal was created, including research guides on Aboriginal

topics. Funded by the Aboriginal Education Council and developed in collaboration with Aboriginal faculty and students, the portal has received over 200 views since it was launched in 2015. RULA has deepened its collaborations with Student Learning Support. The Long Night of Procrastination has been offered twice in the SLC. Providing a safe and quiet study/research/writing space for students at a critical point in the semester, librarians, writing support staff, tutors and other student support services were on hand to provide assistance. An all day and evening event has been scheduled to assist graduate students in thesis research and writing through workshops and clinics. Librarians and tutors are available for support.

The Library has had a longstanding relationship with the Academic Integrity Office that included the development of interactive tutorials, workshops and presentations at the Faculty Conference, *Creating the Ethical Classroom*. In partnership with Student Learning Support, an LTO grant enabled the development of research and writing online tutorials for graduate students, completed in March 2016. RULA developed a strategic framework for the DME Lab, which is now part of the Zone learning support network. Tutoring, workshops, a website, makerspace and a 3D printing service model are now well established, with strong relationships forged with such programs as Master of Digital Media and Architecture. The first year of the SLC required considerable attention to the technology support infrastructure. Service level agreements were revised for the seminar rooms, and improved response time for seminars and study room support and an issue tracking system were developed for SLC technology issues. The laptop leasing program was implemented and 60 new laptops enhanced the mobile learning strategy.

### **Goal 7. Increase capacity to develop collections in identified areas of cross-disciplinary research themes**

The biggest emerging challenge is around resourcing research collections. University growth and research output means increased subscription costs. RULA has had no option but not to renew some licences, focusing on those products that would least affect the Ryerson community at large. The 85 cent dollar in January 2015 had fallen to 70 cents US by December. With 100 per cent of its monographs and 85 per cent of its serials invoices in US dollars, RULA estimates a loss of over \$800k in currency exchange alone. This has rippled throughout the strategic plan, with some goals severely hampered. The goal to transform service models for continuous improvement for users centred on the creation of a front facing manager for staffing, training and customer service. Funding has had to be diverted to support research collections. Similarly the review of Borrowing and Lending services desks for greater service efficiency had to be postponed so that funding could be diverted to collections support. Another goal focused on increasing capacity to develop collections in cross disciplinary research themes. While the stated goal was to evaluate, sustain and strengthen library holdings in research areas of strategic importance as per the OPVPRI strategic plan, RULA was unable to address this in the current fiscal environment.

## **J. Office of the Vice-Provost, Students**

In 2015-16, the Office of the Vice-Provost, Students and the 300 employees who work within the diverse portfolio that includes the Registrar's Office, Athletics and Recreation, and Student Affairs actively pursued their academic plan goals and objectives.

The year's most notable highlights include the launch of ServiceHub, a one-stop shop for all students' academic administrative needs, the consolidation of all Student Learning Support programs other than the Test Centre to the fourth floor of the Student Learning Centre, a record number of Academic All Canadians among Ryerson's varsity athletes, historic achievements in men's and women's basketball and volleyball, and the establishment of Ryerson's new Office of Sexual Violence Support and Education.

### **Goal 1. Help to build a culture of empathy, support and responsiveness for students**

- The ServiceHub was launched in August 2015, representing a four-year transformation of the Registrar's Office. Wait times were reduced from 30 to 60 minutes at three different counters to two to four minutes at one central counter.
- The Office of Sexual Violence Support and Education was established in August 2015 and the inaugural coordinator hired in November 2015. This office reflects the adoption of a new single policy to prevent sexual violence, support survivors and create a consent culture.
- #TakeCareRU Therapy Groups were reconfigured, rebranded and relaunched to reach more students with mental health challenges. A total of 1,675 students participated in therapy groups, representing a 41 per cent year-on-year increase.
- A formal review of the Fresh Start program showed that Fresh Start participants were 11 per cent more successful than RTW students who returned but who did not participate; 83 per cent of all Fresh Start participants are actively enrolled or have graduated.

### **Goal 2. Build a sense of community and pride among students**

- There was record attendance at over 100 Orientation Week events, with 10 major events having a 1000 or more in attendance at each, in comparison to the seven major events in 2014. In addition 200 student leaders were trained over two days.
- Athletic pride and spirit were particularly strong across the campus with the first ever Canadian Interuniversity Sport nationally-ranked number one team (men's basketball). Half of Ryerson's teams are currently nationally ranked, and Ryerson has a record number of Academic All Canadians with 29 student scholar athletes on track to be recognized this year. There were 18,000 visits to the MAC and RAC in 2015.
- The co-location of all Student Learning Support services to a one-stop destination on the fourth floor of the Student Learning Centre created opportunities for new programming and an enhanced community for scholars.

- The rebranding and relaunching of the online Connect RU student engagement tool resulted in more than 27,000 active student users, 200 campus group registrations and 820 campus events advertised.

### **Goal 3. Innovate systems, operations and administrative processes**

- The Registrar’s Office implemented new technologies, undertook an HR reorganization, and extensively cross-trained a new client services team as part of the rollout of ServiceHub.
- International student recruitment saw double-digit increases for fall 2016 based upon intensified recruitment strategies.
- Undergraduate Admissions and Recruitment saw engagement across all forms of social and digital media quadruple this year. New strategies resulted in record attendance at Discover Ryerson Day, from 3,700 in 2014 to over 8,500 in 2015. Initial analysis shows that the quality for fall 2016 Ontario secondary school applicants has increased.
- New partnerships with academic faculties resulted in new day camp programs, with a 46 per cent revenue growth since 2013.
- Work is underway to source vendors and external partners for an improved waitlist management system which will be used by the Centre for Student Development & Counselling and also for therapy group enrollments.

### **Goal 4. Embrace fully the university’s values, in particular EDI**

- EDI training was provided for all Career Centre staff; while an Aboriginal blanket exercise and educational sessions were conducted for over 80 student affairs staff.
- The Tri-Mentoring Program expanded group mentoring to include mature students, Arab women in science, Latino/Latina students, and students with disabilities.
- Counselling staff continued to receive specific diversity and anti-oppression training and professional development to be responsive to the mental health needs of diverse students.
- The Career Centre launched “Voices of Experiences”, a networking and speakers’ series on career matters with alumni and community leaders of diverse backgrounds.

### **Goal 5. Provide growth and development opportunities for OVPS staff**

- With the transformation of the Registrar’s Office and the launch of the ServiceHub, there were increased opportunities for cross-training, coaching and mentoring.
- A staff competency framework was implemented among all MAC employees within Student Affairs. This framework will be rolled out to incorporate OPSEU performance planning in 2016.
- Ryerson Student Affairs work was highlighted for a third straight year as a best practice by the Educational Advisory Board, given that over half of Student Affairs staff hold volunteer leadership roles in professionally-related organizations and committees.

## **Goal 6. Build a culture of community engagement and philanthropy among students and staff**

- Athletics established its first ever \$1 million scholarship endowment, with an anticipated \$500,000 in fundraising revenues for 2015-16.
- There was sold-out attendance at the inaugural #TheRoadAhead forum on graduate employability in the GTA. This event attracted senior MTCU advisors, PSE professionals from across southern Ontario and employers. It also inaugurated a partnership with Magnet, the career networking platform, founded by Ryerson in conjunction with the Ontario Chamber of Commerce.
- A total of 60 student staff from Housing and Residence Life spent a day at one of five community organizations as part of the new Your Neighbour program which helps inculcate community engagement values throughout the university.
- A total of 240 active student participants, over 35 volunteer opportunities, and over 25 community partners were involved in VolunteerLink, an online portal that matches students to community service/engagement opportunities.
- The Tri-Mentoring Program, now in its 16th-year, continued its outreach and engagement initiatives including "Day in the Life" where 180 high school students heard from first-generation university students about the benefits of post-secondary education, and its weekly tutoring program at City Adult Learning Centre and Thorncliffe Neighbourhood Office.

## **K. Learning and Teaching Office**

The Learning and Teaching Office is Ryerson University's central portal for teaching and learning support with multidimensional programming that disseminates advances and innovations in teaching, learning and pedagogy. Its goal is to foster a culture of best practices in teaching and learning based on the scholarship of teaching and learning as articulated in academic publications and scholarly conferences. The LTO's clients include anyone teaching for Ryerson on or off campus: Ryerson Faculty Association members, limited term faculty, part-time and sessional instructors, CUPE instructors, teaching assistants and graduate assistants.

The LTO's work is occurring within a broader educational landscape that is changing in important ways. There is an increasing emphasis on issues of equity, diversity and inclusion in the development of teaching methods that fully recognize diverse student populations. There is also a greater focus on the assessment of learning outcomes, requiring specific forms of course design training. The growing diversity in modes of instruction – experiential learning, e-learning, Zone learning, intensive offerings, studios/labs, collaborative and interdisciplinary teaching – is also increasingly being taken into account. With these shifting trends, it is an exciting time for Ryerson, as an institution keen to maintain its reputation as an innovator in learning and teaching practices.

Progress was made on all of the LTO's goals. Highlights include the following:

### **Goal 1. Offer programming that allows our participants to develop diverse modes of instruction that serve our increasingly diverse student body**

The LTO's programming is being constantly updated so that it speaks to the needs of current learners and teachers. New workshops offered this year include:

- Engaging adult learners
- Learning catalytics
- The use of open access materials
- Managing Brightspace by D2L
- Employing social media to develop a learning community
- Cultivating teachable moments
- Ensuring ethical outcomes
- Fostering a diverse and inclusive classroom
- Increasing engagement with Student Learning Services for students from STEM areas
- Academic accommodation
- Academic conduct

On a year-to-year basis, workshop attendance between 2014-15 and 2015-16 increased from 1,934 to 2,239 participants, while this past year also saw the first annual 3M Fellow Lecture. The 2015 annual faculty conference, on the topic of e-learning, saw attendance of 606, up from the previous year's 580. There were over 90 submissions by faculty.

A new teaching chair position was added in TRSM, while teaching chairs held an unprecedented number of workshops within their faculties.

**Goal 2. Continue to promote the values of equity, diversity and inclusion with respect to teaching.**

Topics related to EDI are infused in all of the LTO's workshops. This year a new EDI-specific workshop was co-presented with the office of the AVP/VP EDI on cultivating a diverse and inclusive classroom. There were also EDI-specific workshops for TAs and GAs, with topics including inclusive grading, dealing with classroom diversity, supporting the writing development of non-native English speakers, and effective assessment in an inclusive environment. The Universal Design for Learning Committee, which deals with making courses more accessible to students with accessibility issues, was relaunched in September. Also the LTO continued to provide the services of an English language specialist who deals with English as an Alternate Language issues in both group and one-on-one settings. The LTO's social media presence was refocused, while work has been underway with the Academic Integrity Office to infuse their principles with a workshop in September 2016. The second round of the National Council for Academic Transformation competition also took place, offering funding to faculty with an interest in trying out alternative forms of teaching, often with EDI-related aims.

**Goal 3. Develop and deliver new programs for faculty on e-learning and technology enhanced learning**

In conjunction with CCS, DMP, The Chang School's DES unit, and the Office of E-Learning, the LTO introduced a new suite of well-attended workshops on e-learning. This series comprised workshops in technologically enhanced learning, the use of iClickers at Ryerson, flipped classroom teaching, enhancing pedagogy via open educational practices, using Brightspace, and the employment of social media in the development of a learning community.

**Goal 4. Address the increasing importance of evaluation of course learning outcomes**

Over the past year the LTO liaised with Ryerson's curriculum development consultant to create workshops and one-on-one sessions to be offered in 2016-17 for faculty interested in reworking their syllabi to include explicit learning objectives to facilitate mapping between course content and UDLES-based outcomes.

**Goal 5. Expand existing and develop new programs and resources to support experiential learning**

The LTO has been preparing workshops and lunch and learn sessions to be offered during 2016-17 on experiential learning. This preparation has included researching what the literature has to say on best practices and interviewing faculty members known for their expertise in experiential learning.

**Goal 6. Maintain and expand the number of externally accredited programs offered by the LTO**

The LTO has been in the process of accrediting the third level of the Ryerson Graduate Professional Development in Teaching certificate program. Levels 1 and 2 of the program are already accredited through SEDA, an academic accrediting body.

## **L. Zone Learning and the DMZ**

In June 2013, Senate approved an optional specialization in Zone learning and the Provost appointed an inaugural Director of Zone Learning to implement an experiential learning program for Ryerson students and members of the community to pursue innovation and entrepreneurship activities via the university's distinctive Zones.

Participants in the Zones enrol in CEDZ 100, which is the constituent course of the optional specialization. Enrolees in this pass/fail course, which is administered by an academic director for the different Zones, are provided with the following: dedicated workspace, access to advanced manufacturing equipment, mentorship and support from academic, industry, and community experts and leaders, and the chance to join a distinctive community of likeminded creative and ambitious individuals. Participants in Zone learning seek to make positive social and economic impacts on the world beyond campus and receive transcript recognition for their efforts.

Each term, the Zones offer, together, 40 to 50 learning modules, in the form of talks, workshops, demos, day-long themed conferences, etc. on domain-specific topics related to innovation and entrepreneurship. Additionally, students have access to a suite of talks on entrepreneurship provided via the Startup School initiative. In fall 2016, the Office of Zone Learning will launch a distinctive new evaluation and assessment platform intended to offer both comprehensive Zone-wide and personalized reports and reflections on the experiential learning taking place through this program.

### **Goal 1. Increase opportunities for students to pursue innovation and entrepreneurship through Zones**

Over the past three years, the number of Zones on campus has grown from two (DMZ, formerly Digital Media Zone, founded in 2010, and the incubator at the Centre for Urban Energy, iCUE, founded in 2012) to ten. The Zones, differentiated by domains and disciplines, are as follows: DMZ, iCUE, Fashion, Design Fabrication (both founded in 2013); Transmedia, SocialVenture (both founded in 2014), Legal Innovation, Biomedical, iBoost, and Launch (all founded in 2015). A new Zone, related to innovation in Science, will be launched in fall 2016. Over the past three years, just as the Zones themselves have increased in number, so too have enrolments in CEDZ 100, growing from 13 in the inaugural term to 676 in winter 2016.

### **Goal 2. Increase linkages between established academic programs and the Zone Learning model**

Ongoing discussions with colleagues continue across the university to identify pathways between established curricular offerings and Zone learning, with particular successes already achieved and consolidated in the Faculty of Arts, with its SSH Innovation sequence of courses, and emerging opportunities related to Data Analytics courses from TRSM, and also FCS with its new social innovation minor, FEAS with its biomedical engineering program (connected to

Biomedical Zone), its optional specialization in innovation and entrepreneurship and pre-existing connections to courses that relate to the Design Fabrication Zone, and the Faculty of Science with its CKIH 200 (RySciMatch) course and a proposed future Zone sponsored by this Faculty.

### **Goal 3. Contribute to the university's larger access to education strategy**

Recent graduates and other community members can significantly benefit from strengthening their relationship to Ryerson and pursuing a distinctive educational experience, though involvement in Ryerson's Zones. The challenge is to encourage a productive relationship to alumni and likewise to innovators and entrepreneurs in the city who, alongside students pursuing activities in Zones, can create a lively atmosphere for peer-to-peer learning and collaboration. A breakdown of CEDZ 100 enrollees as full-time Ryerson students, alumni, and community members and, Zone by Zone, is helping establish a sense of the right ratios of these groups to ensure the right culture and community in the Zones themselves.

#### **The DMZ**

The DMZ's mission is to fuel the success of entrepreneurs by connecting them with customers, influencers and experts in a community that drives global innovation and learning.

The last six years have seen the DMZ attract the top entrepreneurs in Canada, secure partnerships with industry changing companies, and bolster the Canadian economy by creating over 2,000 jobs. Ryerson's visionary leadership has transformed the way students learn through an innovative approach to experiential learning and entrepreneurship. Zone learning has become a model for institutions around the world. The Zone network allows for enhanced student experiences, beyond the standard classroom, and encourages cross-pollination throughout the university. The DMZ is proud to be Ryerson's initiating force for students and professionals that are launching their entrepreneurial ambitions into scalable companies.

Accomplishments in 2015 include:

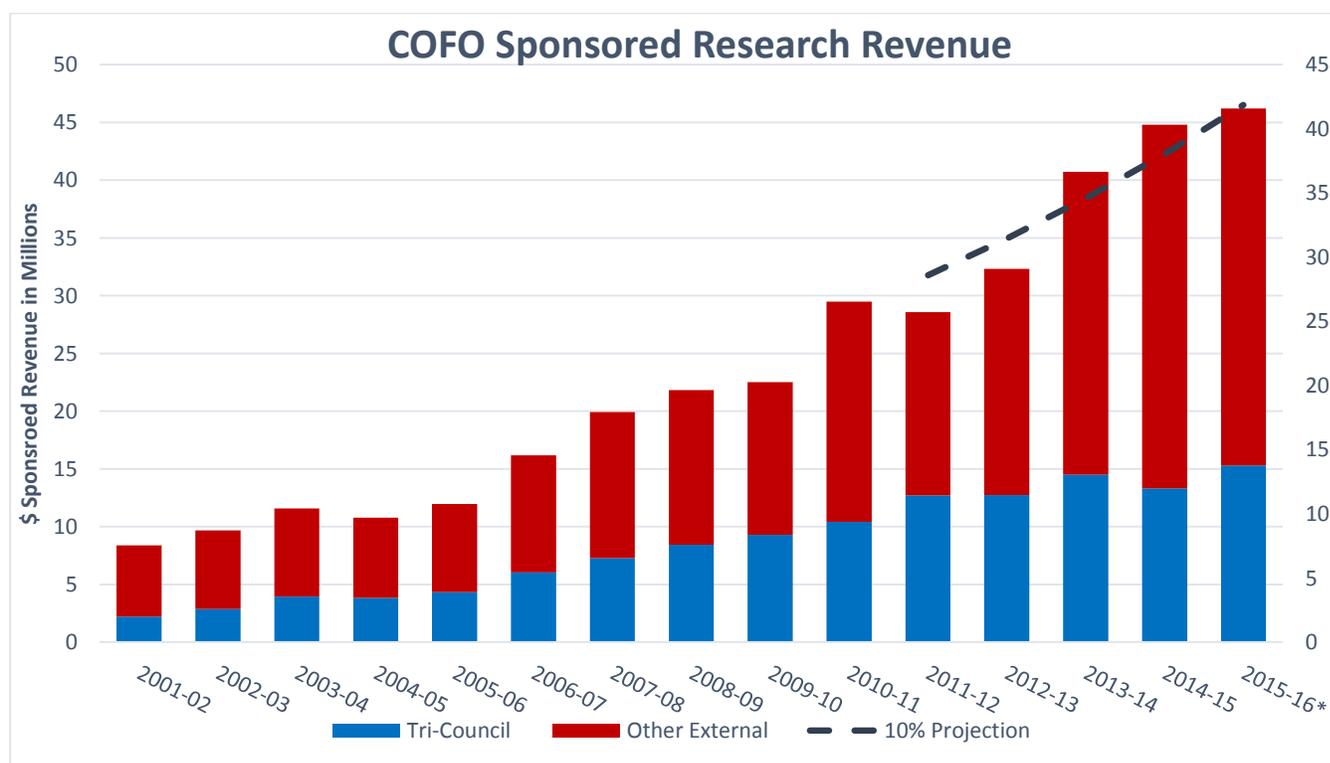
- Ranked number 1 university business incubator in North America and number 3 globally, up 2 spots in both categories from 2014
- Awarded the Toronto Board of Trade *Local Economic Impact Award 2015*
- Since inception, over \$139 million in funding has been generated by DMZ startups
- Over 400 tours came through the DMZ in each of the last two years
- 124 DMZ events took place, including 87 evening and weekend events, while 163 Launch Zone events took place
- Incubated on average between 80 to 95 startups in the space at any given time
- A total of 64 new startups joined the DMZ and there were 65 new DMZ alumni companies
- A total of 2,090 jobs were fostered and created through newly formed startups and market-driven research, since inception
- On average, there are over 400 innovators in the space on any given day
- There were 411 applications to the DMZ in 2015

- There were 120,000 interactions with front desk staff in 2015, according to metrics provided by LiveGauge, a DMZ company
- There were 1,347 media mentions, up from 933 in 2014
- There was a total of 382,223 page views on the DMZ website, up from 243,618 in 2014
- 651 CEDZ participants enrolled, up from 589 enrolled in 2014
- Business Development raised \$605,000 in donations, sponsorships, and pledges
- Hosted high level tours, including C-level executives, international delegations, and HRH Prince Edward The Earl of Wessex during his royal tour to meet with innovators in the space
- Partnered with MasterCard to form the Women in Entrepreneurship program
- Partnered with Innovation Birmingham to launch the Next Big Idea Contest, giving young innovators an opportunity to make valuable connections world-wide and to expand their business on a global scale
- Continued to develop and expand a global network of innovation zones with 45 national and international partners, including close partnerships with Indian and South African incubators

### III. THE VPRI ANNUAL REPORT TO SENATE

Our progress in 2015-16 has continued to foster the University’s scholarly, research and creative (SRC) enterprise. SRC is core to our mission as a comprehensive university and our academic plan. It informs teaching and learning, affects our allocation of graduate programs and students, influences our ability to attract and retain high performing faculty, funds students and post docs, drives reputation and serves societal needs by driving social, cultural and economic development. This report will outline the results the Office of the Vice President of Research and Innovation has achieved working across the University and with external partners to advance Ryerson’s SRC goals.

#### Goal 1. Increase research excellence, quality and participation through support to all researchers at all stages



\*Estimated minimum - yet to be finalized.

One indicator of SRC performance that influences university rankings is the funding received to support research. Ryerson University research revenue for 2015-16 is projected to be about \$47 million, an increase of 65 per cent since 2011-12, exceeding our target of an average of 10 per cent per year.

Overall, Ryerson is ranked 11<sup>th</sup> among non-medical universities in Canada in terms of research funding. In 2015, Ryerson researchers produced 1032 academic publications, which represents

over 7 per cent growth from 2014. Our researchers were cited 12,381 times by other scholars, which represents over 20 per cent growth from 2014.

Ryerson has been on a strong trajectory to support SRC. The focus of the OVPRI over the last five years has shifted from administering SRC grant programs to proactively supporting faculty at all stages of their development. Working with the Associate Deans, SRC and Faculty based support systems, OVPRI provides a wide range of services to reach out to faculty, to identify funding opportunities, to help prepare successful grant applications and help administer the programs.

More than one third of research funding came from the Social Sciences and Humanities Research Council (SSHRC), Canadian Institutes for Health Research (CIHR) and the Natural Sciences and Engineering Research Council (NSERC). This year was another milestone year at Ryerson. Ryerson doubled its market share for SSHRC Insight grants from 0.8 per cent to 1.6 per cent, receiving seven SSHRC Insight grants worth \$1.26 million (compared to 4 grants worth \$627,615 in 2015). We received for the first time two large multi-institutional awards - a \$5 million Strategic Network Grant from NSERC and a \$2.5 million Partnership Grant from SSHRC. In both cases OVPRI provided support dedicating staff to assisting the principal investigators in planning, coordinating and drafting these proposals. This year marked a banner year for Ministry of Research and Innovation (MRI) Early Researcher Awards (ERA) – a very prestigious award for early career researchers – and the most ERA awards Ryerson has ever received in one round of competition since the inception of the ERA program (over 10 years ago). This year Ryerson received its first ever CIHR eHealth Innovations Partnership Program (eHIPP) grant and Ryerson was awarded two of only 34 CIHR-NSERC Collaborative Health Research Project (CHRP) grants awarded across Canada, together totaling over \$1.33 million – the highest amount of funding ever awarded to Ryerson through this program.

New government funding opportunities have been identified and pursued, including smaller, niche opportunities, which has led to a new funding for researchers across the University. This resulted in a 50 per cent increase in the number of applications submitted to government Agencies (outside of SSHRC, NSERC and CIHR) from 25 in 2015 to 40 in 2016. Many of these grants supported research in the Faculty of Arts, Faculty of Community Services, Faculty of Communications and Design and Ted Rogers School of Management and included Ontario Ministry of Community Safety and Correctional Services; Law Foundation of Ontario; Ontario Women’s Directorate; Canadian Poultry Research Council and Ministry of Training Colleges and University.

The OVPRI also provided a range of training programs and support services targeting researchers in earlier stages of their development as well as support for students (described below). In order to strengthen alignment between the SRC strategy and Academic Plan, through a major initiative with the Provost and Vice Provost, each faculty has develop concrete

targets for SRC aligned to the overall SRC strategy and supported with detailed operational plans.

## **Goal 2. Expand SRC partnerships**

Increasingly funders are focusing on relevance as well as impact requiring Universities to work closely with industry or community partners and to obtain commitments through matching funds to support SRC. Ryerson has long been in the forefront of applied research which meets societal needs and has redoubled its efforts to grow collaborative and applied research through outreach to identify opportunities and partners for faculty research have produced large-scale successes – the potential for growth is limited only by capacity.

OVPRI has continued to grow our partnerships in all areas (not-for-profits, industry and governments) and to develop innovative multi-stakeholder projects working with more than 180 external organizations. We have also focused on developing infrastructure to deliver on large-scale institutional, multi-partner initiatives. For example, Dr. Henry Parada's multi-faceted, multi-year SSHRC Partnership Grant - Rights for Children and Youth Partnership (RCYP) - included \$2.5 million from SSHRC and \$1.9 million from partners including 12 universities, 13 partners and 20 collaborators from across the two continents. Dr. Bala Venkatesh's NSERC Energy Storage Technology Network (NEST), funded under the NSERC Strategic Network program, brings together a team of 27 researchers across 15 universities with 14 industry and government partners is part of the NSERC Energy Storage Technology Network (NEST). The two year \$7.4 million Ontario Centre for Workforce Innovation grant, the largest grant ever received by Ryerson, includes 14 partners across the province and requires extensive coordination. These grants were only possible as a result of building relationships with community and industry partners and demonstrating Ryerson's capacity to lead, coordinate, manage and deliver on significant on concrete and measurable outcomes. The year over year increase of awarded external funding in the applied research area was 16 per cent over the last fiscal year to \$11,649,526. This increase was significant in that two of the standard partner matching sponsors, Mitacs and OCE, essentially shut down their programs to new applications in September, six months into their fiscal year, due to a lack of funds. The programs were only reopened April 1. The OCE VIP awards were limited to 9 this year compared to 16 last fiscal (a \$300,000 difference), while the Mitacs grants were limited to 17. (By contrast we were awarded 23 Mitacs applications representing 42 internship units last fiscal year.)

Ryerson is once again is the top in Ontario (second in Canada) based on eligible faculty for NSERC Engage grants. Our past success in these grants are paying off with an all-time high of 17 NSERC CRDs applied for in fiscal year 2015 as compared to 8 the year before. This (generally) multi-year funding will provide faculty members with stability in their research programs. Likewise we were successful in promoting participation in the newly launched OCE VIA programs that provide large scale partnership funding (\$500,000+) to a select few (about four per call) projects. Of the four calls that were launched this fiscal year Ryerson submitted seven

applications, was awarded one and has been invited to submit full applications for three that are still outstanding.

The OVPRI leads the proposal development and administration of funding from the provincial and federal governments supporting entrepreneurial and technology-based innovation activities at the incubation zones and other programs at Ryerson. This funding currently totals over \$13.9 million for the five years from 2013-14 through 2018-19. The Ontario Centres of Excellence (OCE) has just confirmed \$1.2 million in May 2016 for the 2016-2018 extension of the OCE Campus-Linked Accelerator program, the maximum that could be awarded to Ryerson. In addition to the CLA program, the OVPRI manages the \$10.7 million funding it received from the Canadian Accelerator and Incubator Program (CAIP) for the Incubate Innovate Network of Canada (I-INC). Led by the OVPRI at Ryerson, I-INC is a national, innovation technology-based incubator network between Ryerson University, Simon Fraser University (SFU) and the University of Ontario Institute of Technology (UOIT) and has expanded incubation space across the three institutions by 43,000 square feet

We also deepened our connections with research partnerships such as the Fed Dev-funded Southern Ontario Smart Computing Infrastructure Program (SOSCIP) and the Southern Ontario Water Consortium (SOWC).

### **3. Provide opportunities for students**

SRC informs teaching and learning and is critical to providing high quality, relevant and current education as well as experiential learning opportunities. Almost half of SRC funding brought to Ryerson is used to pay students, post-doctoral fellows and recent graduates. Both undergraduate and graduate students are crucial to supporting Ryerson's SRC productivity and excellence and in turn the allocation of graduate programs and student spaces by the Government of Ontario is tied to Ryerson's SRC performance. An important criterion for awarding SRC funding is its contribution to training students. Ryerson must further emphasize the link between research and teaching, continue to support initiatives that develop highly qualified personnel, engage students in the research enterprise, and help provide hands-on experiential learning opportunities through internships, research assistantships, on-the-job training, and supports for start-up and spin-off incubation. Further efforts must also be made to promote graduate student research to external audiences.

The OVPRI continued to increase support for our high-impact programs and initiatives for students and graduates. We continued to prioritize funding for students with an additional \$500,000 for the Advanced Digital and Professional Training (ADaPT) program funded through the Ministry of Economic Development, Employment and Infrastructure which provided training and paid internships for students as well as several collaborative projects which enhance skills and applied research opportunities for students. We also doubled the amount of Summer Company funding to help support entrepreneurial projects and have transitioned that program to the new Ryerson Launch Zone to support 50 student-led startups in summer of 2016.

The OVPRI has also worked in collaboration with other areas of the University to bring together research and learning. We have worked with the Faculties to restructure OVPRI's Summer RA and Undergraduate Research Opportunities support program to make it more responsive to their needs.

Over the past 2 years, the OCE Campus Linked Accelerators Program (CLA) funding obtained and administered by the OVPRI supported over 1,300 events across Ryerson with over 17,000 student participants and over 12,000 youth from the broader community. CLA funding also supported over 50 entrepreneurial competitions and contents reaching over 5,700 student participants and over 1,000 additional community youth. The CLA funding reaches beyond the 10 Ryerson Zones to support student-led activities. For example, the OVPRI partnered with the Ryerson Students' Union (RSU) to direct special CLA funding for 6 student-led workshops and events that contributed to the culture of innovation and entrepreneurship across the campus.

The OVPRI also continued to distribute funds raised to support student (along with faculty) working on social innovation, specifically the RBC Immigrant, Diversity and Inclusion project, the McConnell Foundation RECODE Project and the Social Enterprise Demonstration Fund. Eight students received \$70,124 in funding along with 9 faculty who received \$81,815 courtesy of the RBC project. Thirteen students and 7 faculty members received more than \$100,000 in RECODE funding for social innovation projects. Beyond funding and support, OVPRI's work promoting the Ryerson University Lifeline Syria Challenge has not only helped build the profile of the University but has created rich experiential learning opportunities for students and extensive connections with diverse clubs and community organizations involving more than 1000 volunteers, of them students, across the four Toronto Universities – U of T, York, and OCADU.

#### **Goal 4. Strengthen interdisciplinary collaboration across themes**

In its strategic plan for SRC activity, Ryerson has identified interdisciplinary research across eight themes: 1) Digital Media & Technology; 2) Energy & Sustainability; 3) Health & Well Being; 4) Technological & Industrial Innovation; 5) City Building & Social Justice; 6) Design, Culture & Creative Industries; 7) Management, Entrepreneurship & Competitiveness; and 8) Teaching & Learning for the New Economy. These themes have been the basis for a series of events and mixers aimed at building cross-disciplinary collaborations across Ryerson and with external partners.

Working with the Associate Vice President of Communications, Government and Community Engagement, we have deepened cross-university collaboration and messaging, with various units participating in more than 60 tours and presentations involving government and industry. These efforts made by OVPRI have brought \$14.8 million of funding to the university for cross disciplinary initiatives including \$3.8 million funding for research centres. Almost 70 articles through our bi-monthly newsletter profiled researchers across the campus and disciplines has covered our 8 priority themes.

## **Goal 5. More focused and deeper internationalization with expanded engagement**

In 2012, Ryerson's Internationalization Framework was developed identifying priority goals and regions as well as strategies to expand and deepen Ryerson's international presence. We have continued to progress towards those strategic goals while supporting the international interests and objectives of individual academic units and researchers. The targeted partnerships in specific regions are Brazil, India, China, Africa, and OECD countries like the USA. Currently we have 141 international partners in 36 countries and this year we had 237 inbound and 217 outbound exchange students.

International engagement with target countries continues to build momentum through engagement on the part of the academic units, as led by the executive group and Deans. Ryerson executive members have participated in Ontario Trade and Education missions, led by Premier Kathleen Wynne, to both China (Wendy Cukier) and India (Mohamed Lachemi). The Deans of FCAD, FCS and TRSM have engaged in missions to strengthen ties in India (Usha George and Charles Falzon), South Africa (Usha George), and China (Steven Murphy). Many new Memoranda of Understanding and agreements have been signed, including one with Tsinghua University, the top ranked institution in China.

Applications for funding through the Ryerson International Work Experience Fund saw an increase over last year – 46 in total, as compared to 37 – indicating growing interest in international experiential learning, and the International Conference and Research Support Fund continues to be oversubscribed while also successfully leveraging matching funds from Faculties.

Additionally, Ryerson International continues to be an effective complement to the other channels of research revenue cultivated within OVPRI. Beyond ongoing project management support to faculty-led international development projects, Ryerson International was a key contributor to the work of Dr. Cecilia Rocha and collaborators, whose successful \$1.2 million grant to the International Development and Research Council (IDRC) was the primary driver of a still pending consortium application to Global Affairs Canada to support women's economic empowerment in Jordan (with an aggregate value of approximately \$5 million).

## **Goal 6a. Expand commercialization, knowledge translation and mobilization**

We continue to build our research reputation, which has a tremendous impact on the creation of collaboration and partnership opportunities and our current and future research and innovation productivity.

With our emphasis on innovation and impact, we also recognize that many researchers do not aspire to become entrepreneurs but have intellectual property that may have commercial value and relevance to the community. We have therefore expanded our efforts and capacity to help identify these opportunities and support faculty interested in commercializing their research.

The OVPRI has developed processes to be more proactive in finding commercialization opportunities and supporting them. Three experienced serial entrepreneurs/consultants have been brought in to work with faculty and have produced measurable results, including a 47 per cent increase in invention disclosures thus far this year. We have patent support available for researchers and last year supported the filing of 9 patent applications.

Leveraging CAIP and CLA funding, we have also increased our support to the Ryerson incubation Zones to strengthen connections between Ryerson research capacity, industry partners and start-ups in the incubators. CLA funding broadly supports the development of an entrepreneurial culture at the university including all 10 incubation Zones and other entrepreneurial initiatives, and builds linkages to the local ecosystem. CAIP funding through I-INC focuses on company acceleration and digital technology-based innovation in later stage Zones and centres such as the DMZ, Transmedia Zone, Biomedical Zone, and the Ryerson Centre for Cloud and Context-aware Computing (RC4). Jointly, the funding has supported the growth of our incubation capacity from 5 zones in 2012-13 to 10 zones with over 200 teams today. In the last 2 years, companies at Ryerson have raised over \$148 million in investments and funding, have added over 1,700 jobs and produced high profile successes such as Hit Send, Figure1, 500px, Flybits and Bionik.

Our support is not limited to start-ups and we actively develop collaborations with SMEs and larger firms. For example, RC4 has supported 116 small-medium enterprise (SME) collaborations with Ryerson researchers that helped add over 160 jobs at these SMEs in the past 4 years. In the summer and fall of 2015, RC4 and I-INC worked with IBM Canada's Big Data University team to deliver a series of big data analytics and machine learning workshops that regularly attracted over 100 attendees as a lead up to Sportshack 2015.

The I-INC network with Simon Fraser University and the University of Ontario Institute of Technology has expanded Ryerson's international reach through the shared access to international partnerships for research and market access. In the past year, I-INC has provided 9 Canadian and 13 foreign companies with international soft-landing services and developed reciprocal relationships with 6 global incubators.

We have increased activity in terms of licensing and have expanded our outreach to all faculties, resulting in a new start-up arising out of the Ryerson School of Professional Communication that has already raised \$400,000 in investment, and a product from Midwifery that has achieved early sales. We also continued to provide capacity-building workshops for researchers, including research methods sessions, meet-and-greets and thematic events. As a benefit of our increased commercialization support, we have also increased support for outreach and matching of researchers with industry partners.

**Goal 6b: Support increased SRC dissemination through traditional and non-traditional channels, and publicize the SRC achievements of Ryerson faculty and students to build reputation**

We will pursue more extensive media outreach and communications activities to both celebrate and raise awareness of Ryerson's SRC strengths and achievements. This will serve to attract additional research opportunities and talent and will build recognition of the link between significant SRC pursuits and Ryerson's rising prominence as a distinguished institution.

Our social media activities were ramped up in 2015-16. In 2015-16, our newsletter reach increased as a result of broadening our audience to include all industry contacts, and our click-through rates for the newsletter are increasing. Almost 70 articles through our newsletter and standalone researcher profiles, as well as our annual report, were also widely distributed to industry and government, receiving an average open rate of approximately 20 per cent. Our articles are helping to raise the profile of our researchers. For example, an article in our newsletter Future of Food was picked up by Agrifood Project Services in Guelph for further dissemination to their audiences.

Our social media presence saw great improvements with an increase in the level of activity and impact. We hosted over 60 internal events and presentations, including workshops, lunch and learns, and faculty networking sessions to build capacity in research and to connect researchers with each other across disciplines.

We also organized several external events promoting research and innovation. For example, the B3D Research Symposium, which took place as part of the B3D Design conference in October 2015, attracted over 200 attendees. SportsHack, a Ryerson-led I-INC event run in partnership with the Canadian Football League (CFL), attracted over 170 participants in 3 locations across Canada and garnered the attention of sports media like The Sports Network (TSN) and technology news sites (IT Business, Betakit). The OVPRI also led Ryerson's significant presence at the OCE Discovery coordinating Ryerson's main presence on the show floor as well as exhibits of Ryerson researchers and companies at OCE sector-based "Wow" zones.

### **Goal 7. Streamline administration and strengthen infrastructure (including space)**

As external funding shifts from traditional sources toward collaborative and applied projects, the internal administrative structures that are required to support SRC activity are also changing. Building a comprehensive university requires the development of effective supports and services for researchers. In order to strengthen Ryerson's SRC culture, we are placing a greater emphasis on the assessment and streamlining of administrative structures, processes, services, and resources. This step is necessary to ensure the ongoing effectiveness of university assets, support for SRC activity, and enhanced space utilization.

We continued to improve administrative structures, processes and resources. Most notably, we increased the capacity of our Research Ethics Board (REB) and Animal Care Committee (ACC) through support to improve response time and cope with growing volumes, including increasing the availability of open office hours held around the campus (including the SLC), increase outreach activities and improve administrative processes. A total of 439 new research

ethics board submissions were received and 330 amendments were approved. Changes have been made to the Research Information System to better link activity with research centres and specialized metrics and reporting has been made available to support faculties and departments in their SRC planning.

#### **Goal 8. Strengthen performance metrics and accountability frameworks**

Ryerson must continue to develop performance metrics to drive evidence-based decision-making when improving planning and supports. This year, the OVPRI worked closely with the Deans and Associate Deans Research to develop concrete measurable outcomes for SRC, directly supported by detailed operational plans. We have developed pipeline analyses of Tri-Council to better identify opportunities for researchers and improve processes. Having strong metrics is increasingly important for securing and keeping government funding. For example our success with the Campus Led Accelerator Program, Fed Dev and the Canadian Accelerator and Incubator Program are tied directly to our ability to set clear objectives and put in place processes to track and report on progress. This positions us well for the increased scrutiny universities are facing.