The Oxygen of Community:
Carleton University's Engagement with the Ottawa Region

A report by the

Initiative for Community-University Engagement,

Carleton University, Ottawa

March 2009

Carleton
UNIVERSITY
Canada's Capital University

CONTENTS

Acronyms ii

Acknowledgements iii

Dedication iii

Foreword iv

Introduction v

PART I: CONTEXT 8

Why Community-University Engagement Matters 8

PART II: THE INVENTORY 12

A Two-Way, Continuous Flow: University-Wide Community Engagement 12

Focus on the Faculties: Engagement Through Teaching, Research and Service 19

The Faculty of Arts and Social Sciences 21

The Sprott School of Business Faculty Contributions to the Community 29

The Faculty of Engineering and Design 32

The Faculty of Public Affairs 40

Faculty of Science 51

PART III: TAKING ACTION 55

Conclusions and Recommendations 55

Next Steps 62

Resources on Community-University Engagement 63

Acronyms

AUCC	Association of Universities and Colleges of Canada
CACSL	Canadian Alliance for Community Service Learning
CBR	Community-Based Research
CBRC	Community-Based Research Canada
CIDA	Canadian International Development Agency
CIHR	Canadian Institutes of Health Research
CRC	Canada Research Chair
CSL	Community Service Learning
CUE	Community-University Engagement
CURA	Community University Research Alliance (SSHRC Program)
DFAIT	Department of Foreign Affairs and International Trade
EDC	Educational Development Centre
ESL	English as a Second Language
FASS	Faculty of Arts and Social Sciences
FED	Faculty of Engineering and Design
FPA	Faculty of Public Affairs
GIS	Geographic Information Systems
HENCE	Higher Education Network for Community Engagement
IDRC	International Development Research Centre
ICUE	Initiative for Community-University Engagement
NCLB	No Community Left Behind (City of Ottawa)
NGO	Non-Governmental Organization
NSERC	Natural Science and Engineering Research Council
OCSP	Ottawa Community Sustainability Partnership
SEO	Student Experience Office
SSHRC	Social Sciences and Humanities Research Council
TAFETA	Technology-Assisted Friendly Environment for the Third Age (FED Project)

Acknowledgements

Special thanks are due to the following individuals for their support of ICUE's efforts: Feridun Hamdullahpur, Vice-President (Academic) and Provost; Kim Matheson, Vice-President (Research and International); and Katherine Graham, Dean, Faculty of Public Affairs. The two key players who initiated ICUE in 2007 were Jon Pammett, then Associate Dean (Research and Graduate Affairs), Faculty of Public Affairs, and Darlene Gilson, Director of Research Services. Valuable administrative assistance was also provided by Mary Lou Davies, Christine Barkley, Eija Gardner, Deirdre Nelson, June Payne and Valerie Pereboom. Research assistance was ably provided by Lesley Abraham, Maja Cholich, Leslie Krukoff, Ariel Lincez and Elaina Mack.

Dedication

This report is dedicated to the citizens of the Ottawa Region.

Foreword

I came to work at Carleton University 15 years ago precisely because of its close ties to the Ottawa community and its track record of service to and partnership with local organizations. What is a university *for*, really, if not to contribute to the common good of the region in which it is located? I have not, even for a single moment, been disappointed in Carleton's commitment to this element of its mission.

But I have been surprised. It continues to be my great privilege to work with my colleagues on the Initiative for Community-University Engagement, or ICUE, a broad-based committee that has been, for the past two years, constructing the most detailed picture of Carleton's interactions with the Ottawa region that we have ever had. The surprise has come in learning not only how much of this interaction goes on every day, which has certainly exceeded my expectations, but also the remarkable diversity of forms this cooperation takes -- as well as its high quality, innovation and relevance.

We hope that this report communicates some of the richness and significance of Carleton University's engagement with the community in which it was born. At the same time, it is also true that we can do more, do it better and do it more efficiently. Our University's contribution can make an even bigger difference in the quality of life of our fellow citizens in the Ottawa region. In the process, we will also make our own institution better. With the wisdom and vision of the community leaders with whom we work, the creativity of our faculty, the expertise of our staff and the energy of our students, there is no doubt that we will succeed.

Edward Jackson
Chair, Initiative for Community-University Engagement and Associate Dean, Faculty of Public Affairs, Carleton University

Introduction

Purpose of this Report

The purpose of this report is to document the diverse ways in which Carleton University interacts with and contributes to the broader community in which it is located. It is hoped that the picture painted here will be useful both for the University and for its community partners, first, in affirming the extent and importance of their cooperation and, second, in deepening and expanding the positive impacts of their partnerships.

It is worth remembering that Carleton emerged directly out of the Ottawa community. With the support from the local non-profit, public and private sectors, the University started as a small college in The Glebe, delivering educational programs for veterans returning from the war and citizens seeking viable livelihoods in a new and hopeful era. Offerings in journalism, public administration and the arts and social sciences helped to shape, very directly, not only the character of Ottawa, but also that of Canada as a nation, in the post-war period. [1]

Today, citizens in our community face a host of challenges and uncertainties: a turbulent world economy; volatile demand for commodities, product and services; the evolving needs of an increasingly diverse population; fluctuating crime rates; and the persistence of the economic and social marginalization of certain groups of citizens. At the same time, we have many advantages: a well-educated workforce; a large middle class; a vibrant high-technology sector; solid and responsible public-sector institutions; highly-skilled new Canadians; and a dynamic, non-profit sector, among many other assets.

Carleton University and the Ottawa region are inextricably linked. Our past and present are tied closely together, and our prospects rest, more than ever before, on creating a shared future. Community-university engagement is an important tool in building a common future that is prosperous, fair, clean and safe.

The Metaphor: *Why Oxygen?*

Oxygen gives, and sustains, all human endeavour. The oxygen of community gave life to Carleton University in 1952. Today, as then, this oxygen flows in both directions – from the Ottawa region into all activities of the University and from Carleton – a dynamic community itself –"out" to the diverse sectors and organizations of the Ottawa region. Indeed, the relationship between the University and the community can be seen as a complex eco-system, evolving and adapting over time, as the capacities and needs in both spheres continuously change. As the volume and velocity of oxygen flows grow, this eco-system will flourish.

[1] H.B Neatby and D. McEown, Creating Carleton: The Shaping of a University, McGill-Queen's University Press, Montreal/Kingston, 2002

The Initiative for Community-University Engagement

***Mandate*:** The Initiative for Community-University Engagement (ICUE) is a university-wide committee that documents, celebrates and seeks to strengthen and expand Carleton University's involvement in and contributions to the Ottawa region.

***Background*:** Initiated early in 2007 by the Office of the Dean of Public Affairs and the Office of Research Services, ICUE began a series of meetings that encouraged a wide range of actors across Carleton to share their perspectives and experience on community engagement. The committee drew members from several academic Faculties, Research Services, Student Support Services, Advancement, research centres, and student organizations. The committee also invited leaders from the Ottawa region to make presentations to the group. These meetings continue.

***Research*:** Thanks to financial support from the Office of the Vice-President (Academic) and Provost, and the Office of the Vice-President (Research and International), as well as the Office of the Dean of Public Affairs, ICUE was able to carry out, during 2008, extensive web-based research on the community-engagement activities of faculty members, research centres and student organizations in the five teaching Faculties of the University: Arts and Social Sciences, Business, Engineering and Design, Public Affairs and Science. The present report summarizes the findings of this research.

***Looking Ahead*:** ICUE plans to continue to deepen its knowledge and understanding of Carleton's engagement with the Ottawa region; to find ways of honouring faculty, staff, students and community partners who have led best-practice activities; and to provide advice to senior decision-makers of the University on policies and systems that will strengthen the effectiveness and efficiency and broaden the impacts of Carleton's work in the community in which it is based.

ICUE Members

- Edward Jackson, Chair (from July 2007), Associate Dean (Research and Graduate Affairs), Faculty of Public Affairs
- Jon Pammett, Chair (through June 2007), Associate Dean (Research and Graduate Affairs), Faculty of Public Affairs
- Peter Andrée, Assistant Professor, Department of Political Science
- Ersin Asliturk, PhD Student, Department of Psychology
- Martha Attridge-Bufton, Editor, Carleton Now (through June 2008)
- Patricia Ballamingie, Assistant Professor, Department of Geography and Environmental Studies (from October 2008)
- Jarratt Best, Co-President, Black Affinity
- Julie Carl, Communications Manager, Office of the Vice-President (Research and International)
- Adrian Chan, Assistant Professor, Systems and Computer Engineering
- Rose Cunningham, Lecturer, Department of Economics (from October 2008)
- Nancy Doubleday, Associate Professor, Department of Geography and Environmental Studies
- Jennifer Elliott, Communications Officer, Student Support Services (from October 2008)
- Danette Nearing-Guibord, Field Placement Coordinator, Institute of Criminology and Criminal Justice
- Darlene Gilson, Director, Office of Research Services
- Larry Gemmel, Executive Director, Canadian Alliance for Community Service Learning (from August 2008)
- Beth Hughes, Associate Professor, Centre for Initiatives in Education (to July 2008)
- Clara Jimeno, Coordinator, Community-Based Research Network of Ottawa
- Erin Kaipainen, Leadership and Experiential Education Coodinator, First Year Experience Office (through August 2008)
- Fran Klodawsky, Associate Professor, Department of Geography and Environmental Studies
- Luc Lalande, Director, Innovation Transfer Office
- Coralie Lalonde, President, Katsura Investments
- Joe Lipsett, Leadership and Experiential Education Coordinator, Student Experience Office (from October 2008)
- Michael Mac Neil, Associate Dean (Student and Curricular Affairs), Faculty of Public Affairs
- Rebecca Murray, Senior Associate, Office of Advancement
- Lin Moody, Media Relations Officer, Department of Communications
- Pauline Rankin, Associate Dean (Research and Graduate Affairs), Faculty of Arts and Social Sciences
- René Rivard, Steering Committee Member, Community-Based Research Network of Ottawa
- Karen Schwartz, Assistant Professor, School of Social Work
- Paula Speevak-Sladowski, Managing Director, Centre for Voluntary Sector Research and Development
- Christopher Stoney, Associate Professor, School of Public Policy and Administration
- Adnan Turegun, Executive Director, Research Resource Division for Refugees
- Carl Weatherell, Director, Special Projects, Office of the Vice-President (Research and International)
- Bessa Whitmore, Professor Emerita, School of Social Work

PART I: CONTEXT

Why Community-University Engagement Matters

At the centre of Carleton University's new strategic plan, *Defining Dreams*, are two core principles: excellence and engagement: "The university community defines itself as future-oriented, engaged in solving real-world problems in the local and global communities, inventive and creative, inclusive, egalitarian and committed to excellence."[2] As the plan states, members of Carleton University are "stewards not only of community well-being, but of healthier, more sustainable communities."[3] To this end, the plan commits the University to intensify and expand student engagement and external collaboration, in both research and teaching, increase the number of job placements and internships for students, and celebrate a culture of community service across the institution. Among the committees set up to implement the plan is one that will focus on expanding opportunities for students with local institutions in Ottawa .

Flowing from *Defining Dreams* is Carleton's Academic Plan, whose mission is to: "Create an outstanding student experience within an environment of academic excellence and innovation for students, faculty and staff."[4] The promotion of student engagement and success is the Academic Plan's highest-order strategic goal. Another strategic goal is to: "Give students more opportunities to learn outside the classroom-experimental learning." Increasing partnerships of all types, internal and external, is an additional strategic goal.[5]

There are similar directions in the University's Strategic Research Plan, which, echoing *Defining Dreams* seeks to: "Increase the impact of research through scholarly outlets, student engagement and contributions to the local, national and international communities."[6] Maximizing opportunities for student engagement is an important objective in this plan, referring to both graduate and undergraduate students.

There is a very close relationship between student success and community engagement. Figure 1 presents one way of understanding this relationship: a logic model of two streams of activities and outputs that attempt to strengthen student engagement in the classroom and in the community. Undertaken in parallel, these are complementary, and mutually reinforcing, lines of effort. The immediate outcome is aimed at enhancing the student experience, which in turn should contribute to increased student retention rates and, ultimately, better student performance and improved graduation rates. In this sense, for the University, community engagement can influence the performance of its core business and thus can be considered a tool for competitiveness.

Recognition of the importance of experiential learning and community partnerships is widespread and growing among universities and colleges across Canada. Some 40 university and college programs are affiliated with the Canadian Alliance for Community Service

[2] Carleton University, *Defining Dreams*, Ottawa, 2008, p.1

[3] Ibid, p.5

[4] Carleton University, "Academic Plan", Ottawa, 2009 p.3 (Presentation by Dr. Feridun Hamdullahpur on February 2, 2009)

[5] Ibid, pp.10-11

[6] Carleton University, "Defining Dreams and the Strategic Research Plan," Ottawa, 2009, p.1 (Presentation by Dr. Kim Matheson on February 2, 2009)

Learning, an umbrella body.[7] The annual conference of the U.S.-based International Association for Research on Service Learning and Community Engagement draws 600 to 800 professors, practitioners and administrators to exchange methods, experiences and strategy.[8]

Yet it is more than a concern with student success, important as this is, that has driven the growth in interest in community engagement. The general public, the media and government all have been challenging post-secondary institutions to demonstrate their value to society, especially in an era of pressing social, economic and environmental problems and, at the same time, scarce public resources amid unpredictable change.

Consequently, there has been robust growth in interest in various forms of community – based research (CBR) across many disciplines and all parts of Canada. The 2008 conference of Community University Partnership Exposition, CU Expo, attracted 600 delegates to its sessions at the University of Victoria.[9] A new national network, Community-Based Research Canada, has been set up,[10] as has a new international network[11] and a new journal.[12] This trend has been supported by efforts by Canada's granting councils to strengthen their own links to and impact on Canadian communities. For its part, the Social Sciences and Humanities Research Council has funded more than 100 Community-University Research Alliances over the past decade, which have sought to combine academic and practitioner knowledge to address practical problems faced by regions, sectors and the country on a whole.[13] The Canadian Institutions for Health support CBR on HIV/AIDs and breast cancer, and are consolidating their strategies and tools for citizen engagement.[14] In addition, the National Sciences and Engineering Research Council is expanding its efforts in knowledge mobilization and public engagement.

In its review of Canadian university research, entitled "Momentum," the Association of Universities and Colleges of Canada (AUCC) highlights the diversity and importance of research partnerships between universities and all sectors –private, public and non-profit.[15] Among the benefits of these partnerships are: the education of high-quality talent (mainly graduate students) useful knowledge that is disseminated across disciplines and sectors, and innovations "that fuel new products, process,

[7] The Alliance's Office is based at Carleton University (See communityservicelearning.ca)

[8] The next IARSLCE meeting will be held in Ottawa in fall 2009, organized by the University of Ottawa with the support of CACSL.

[9] For the proceedings of CU Expo 2008, see D.E. Clover and C. McGregor (eds.), "Community-University Partnerships: Connecting for Change", University of Victoria, Victoria, 2008

[10] Carleton University's Faculty of Public Affairs is represented on the Executive Committee of CBRC, as is the Community-Based Network of Ottawa. Other representatives are drawn from the University of Victoria and Université du Québec à Montréal

[11] The Global Alliance for Community-Engaged Research has been animated by the Office of Community-Based Research at the University of Victoria, with the support of the International Development Research Centre

[12] The Ottawa-based online journal, *Manifestation: Journal of Community Engaged Research and Learning*, was launched in 2008

[13] See the website of the Social Sciences and Humanities Research Council of Canada (sshrc.ca)

[14] Canadian Institutes for Health Research "CIHR's Framework for Citizen Engagement", Ottawa, 2009 (Draft). CIHR operates a Partnerships and Citizen Engagement Branch

[15] Association of Universities and Colleges of Canada, "Momentum: The 2008 Report on University Research and Knowledge Mobilization", Ottawa, 2008

services, policies, behaviours and understanding. "[16] These innovations may relate, for example, to improving seniors' care, expanding green construction, increasing access to affordable housing, strengthen Aboriginal language and culture, broadening integration services for refugees, and generating more sustainable energy.

And that is the whole point of community-university engagement. In the final analysis, it must yield tangible – and, ideally, sustainable – benefits to the local community. That is, ultimately, why it matters.

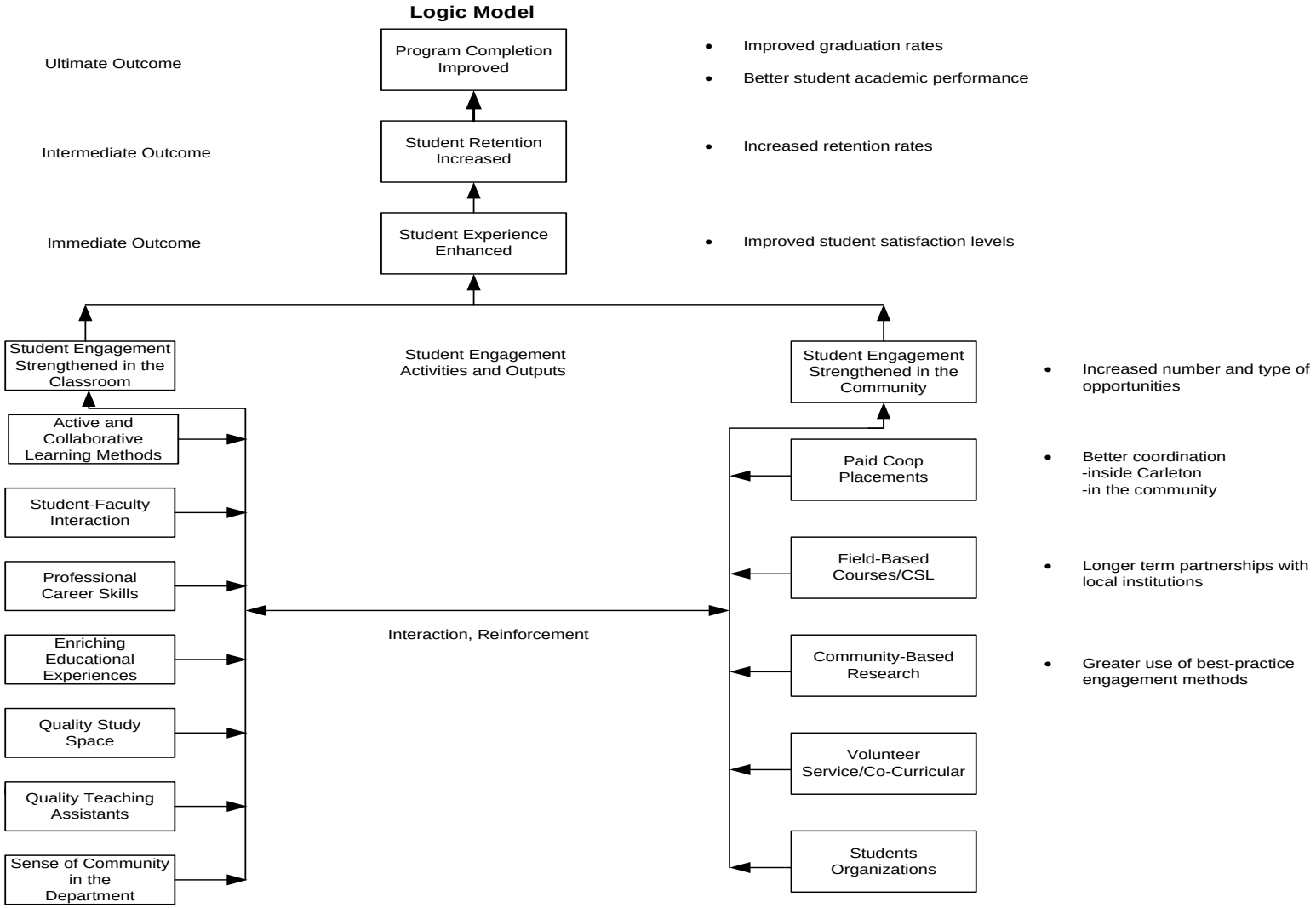
In the current economic turmoil, it is especially crucial that all of our institutions mobilize their resources to enable Canadian to chart pathways forward to new livelihoods. In this sense, community-university engagement has never been more important. Like other post-secondary institutions, Carleton University needs to assess its current capacity, and strengthen and expand its partnerships with organizations in the Ottawa region.

Also like other universities, it must do this within a set of serious financial constraints. This means that any strengthening and expansion of Carleton's community engagement in the short term must be achieved with existing resources. Measures requiring new resources will need to be phased in over the next three to five years.

[16] Ibid, p. 115. See chapter 4

Figure 1

The Relationship Between Student Success and Community Engagement



PART II: THE INVENTORY

A Two-Way, Continuous Flow: University-Wide Community Engagement

It's 9:00 am on a Friday in Ottawa. It is fall, the air is clean and crisp, the sun is bright, the Gatineau Hills burn with autumn colour. Hundreds (yes, hundreds) of Carleton University students have arrived at their desks in downtown offices and are already planning their work tasks for the day. Both graduate students and undergraduates, many are on paid co-operative placements in government departments and agencies, such as Health Canada, Public Health Canada, the Department of Finance, National Defence and CIDA, the foreign-aid agency. Some work on co-ops with management consulting companies and high-tech firms.

Others, mostly upper-year undergraduates and Master's students, have been assigned to local social-service agencies, women's shelters, hospices, arts organizations, and environmental and human-rights groups on field-placements for which they will receive course credit.

Dozens of professors from all the major disciplines at Carleton will be in touch with these students and their host-organizations, supervisors and, in some cases, have scheduled on-site meetings with the partner organizations. At the same time, part-time and visiting lecturers from business, government and the non-profit sector downtown are arriving at Carleton, sorting through their papers and power-point slides, preparing to give their presentation and offer advice to their students.

Inside offices across the University, the annual United Way campaign is about to be launched by staff and faculty. Two different student groups are raising funds for social causes, one for an African AIDS project, the other for sustainable housing in the city's core. Aboriginal students have invited members of that community to campus for a ceremony and conference. A group of seniors attend a non-credit course on Greek history. For their part, Journalism students head out in the afternoon to distribute copies of the Centretown News, reporting on issues and personalities in the core of the city.

At the same time, the Board of Governors, a committee of community leaders from all sectors that is ultimately responsible for the conduct of the business of the University, meets to discuss the institution's strategic plan. Earlier, the University Senate, the senior decision-making body with respect to academic programming, had reviewed several proposals from graduate and undergraduate programs that includeded field-based, experiential learning.

Throughout the day and into the evening, other events on campus will draw the public to Carleton. Featuring well-known speakers, four different lectures will address contemporary scientific, political and social issues. Ottawa art-lovers will come to campus to enjoy a new exhibit at the Art Gallery. A youth dance group with a strong fan base in the community will perform at Mittal Theatre. And nearly 2,000 students and Ottawa residents will fill the Raven's Nest to watch Canada's top-ranked men's basketball team take on a visiting team. At a downtown restaurant, an alumni association for a professional school holds a reception to connect current students and working professionals and raise funds. Meanwhile, a certificate program that trained diplomats from war-torn countries holds its convocation at the Museum of Civilization.

The next morning, Saturday, the Fieldhouse will be the site of a major celebration by a religious group, featuring a bazaar and children's games. A steady stream of families and kids from downtown Ottawa will make good use of Carleton's Olympic-size pool. And throughout Friday, Saturday—and every day, for that matter—CKCU, the University's non-profit radio, offers a selection of news, views and music of all

kinds, produced by students and community members alike.

This "day-in-the-life" depiction of the interaction between Carleton University and the Ottawa region is neither unique nor an overstatement. In fact, it is quite typical. There is a continuous, two-way flow of people and ideas between the University and the broader community. The benefits flow both ways, too. It is very useful indeed for a student to acquire practical work experience in doing a co-operative placement or field practicum. At the same time, host organization can gain from the student's contribution of knowledge and skills (though it must also devote time to training and supervising the student).

Figure 2 depicts the various vectors of engagement, in both directions.

This two-way flow can be documented in terms of the major lines of business of the University, notably: governance, teaching, research, service, student support, and facilities management. Not only do Carleton departments and institutes work hard to bring make their degree programs relevant to institutions and organizations in their fields of specialization, but faculty members and research centres also cooperate, as a *matter of routine practice*, in the design and implementation of, and action on, joint research activities. The examples that follow illustrate the depth and breadth of community-university engagement on Carleton's part.

Still, this critical mass of interaction remains oddly invisible to many observers, and to some in the university itself. Perhaps one factor is that the stereotype of the town-gown division persists among citizens and academics, though this seems, happily, to be waning. Another, possibly more important, factor is the fragmentation and dispersion of all this activity. Notwithstanding Carleton's strong record on interdisciplinary programming, there are still too many "silos" in the university, and also separate segments of the community—and few mechanisms to enable each of these diverse sets of actors to share information and build an aggregate picture of all the separate pieces. Perhaps, though, the real obstacle is simply one of scale. With 24,000 students, 2,000 faculty and staff, and 65 programs, Carleton University is a dynamic community in its own right, operating within the context of the Greater Ottawa region of nearly one million citizens. Building a complete "big picture" of what is going on with respect to Carleton's "CUE" is a complex, time-consuming job. We believe that the examples presented in the pages to follow, for the University as a whole and for individual Faculties, constitute an important first step in constructing this big picture.

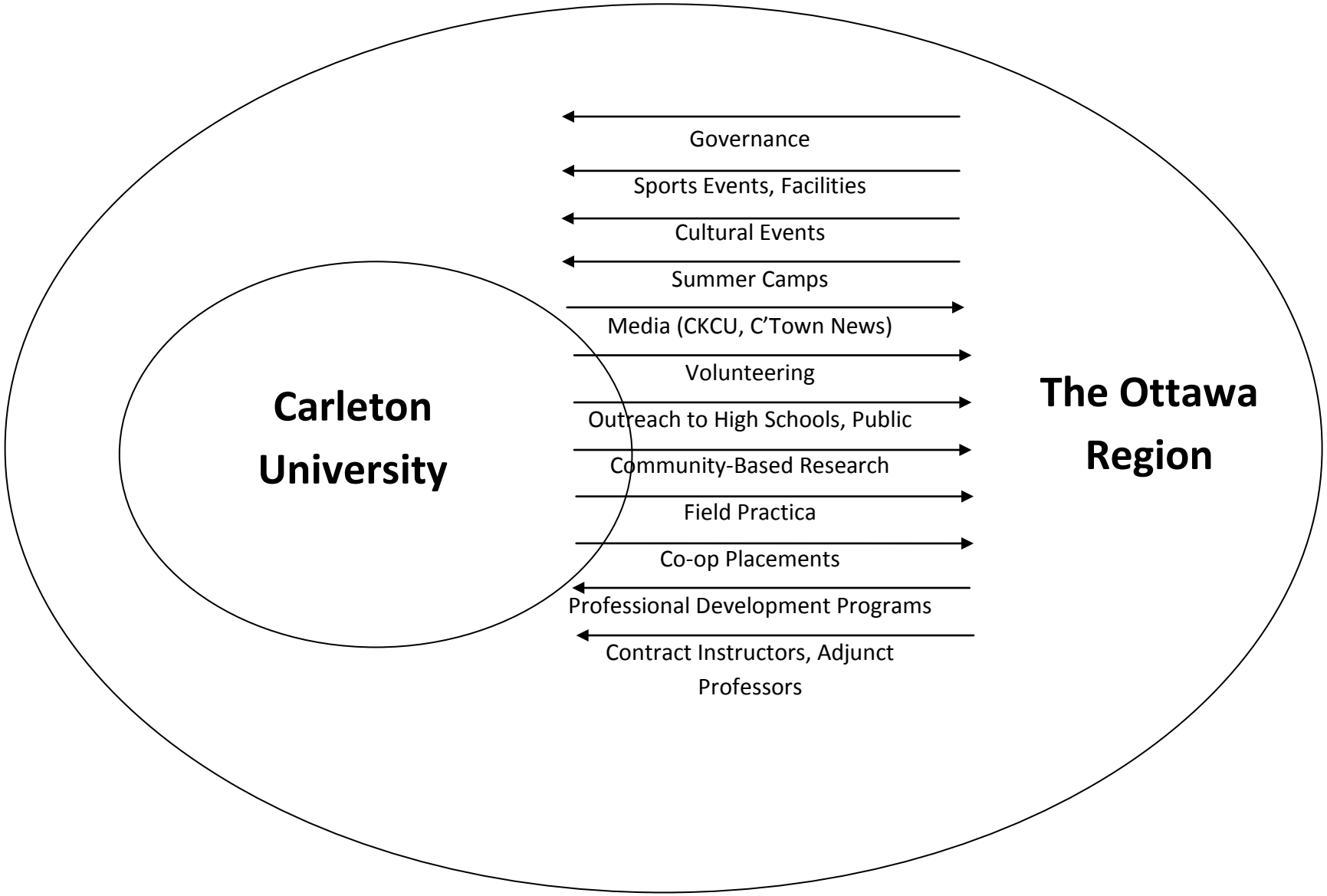


Figure 2

Carleton in the Community, the Community at Carleton

University-wide Community Engagement

Governance

- In addition to representatives elected from Senate, faculty, staff and students, 18 of 30 seats on the *Board of Governors* of Carleton University are allocated to members of the community at large, who are prominent Ottawa leaders in business, government and the non-profit sector. The Board Chair is a partner in a major law firm, and the Deputy Chair a retired senior public servant. The Board of Governors is responsible for the government, management, business affairs and revenues of the University.
- The Board of Governors sponsors an annual award for students (both graduate and undergraduate) in any discipline for *Outstanding Community Achievement*.
- The Board also approves nominees for *honorary degrees* awarded at Convocation; although these degrees often recognize the contributions of national and international figures, many have also been awarded to local leaders.

Teaching

- Each year, University Senate awards the *Senate Medal for Community Service* to a deserving student in any discipline or program.
- *Carleton University Television* (CUTV) has for many years delivered credit and non-credit course offerings via cable television to students and residents across Ottawa and the surrounding region of the Eastern Ontario and the Outaouais.
- Carleton's Undergraduate Admissions Office runs a *partnership program* with 23 high schools in the Ottawa region, offering enriched experiences, tours and faculty member presentations for high school students and their families.
- Setting up its national headquarters at Carleton in Fall 2008, the *Canadian Alliance for Community Service Learning* is a network of Canadian universities promoting excellence and growth in CSL across the country.
- In 2009, a Political Science Assistant Professor used funds from his Teaching Achievement Award to coordinate a capacity-building project on community-service learning in the Educational Development Centre.

Research

- The Vice-President (Research and International) leads a university-wide *Social Innovation Initiative* that engages all Faculties in the institution as well as the non-profit sector in Ottawa, and is guided by an Advisory Committee that includes senior representatives of the Community Foundation of Ottawa, the Social Planning Council and the high-technology sector.
- The Innovation Transfer Office in the Office of the Vice-President (Research and International) works with the Community Foundation of Ottawa and Katsura Investments to run the annual *Social Innovation Challenge*, a competition that invites students from all disciplines, programs and levels to form teams and develop ideas that address social problems, both local and global.
- An interdisciplinary research project on *science regulation and public policy* involving units in the Faculty of Science in partnership with the Faculty of Public Affairs has mobilized partners in the practitioner community from government agencies, research labs and private corporations.
- With the support from the Office of the Dean of the Faculty of Public Affairs, the non-profit Community-Based Research Network of Ottawa has initiated an exploratory dialogue with Faculty Deans (FPA, FASS and Science) to assess ways and means of serving as a broker between University research capacity and the needs of community-organizations working on social-service health, and social-justice issues.
- In early 2009, Carleton University mobilized professors from across its Faculties to

participate in a new initiative to assist the community of Batawa, in Eastern Ontario, in building a sustainable future for its citizens. Involving specialists in citizen engagement, economic development, industrial design, green construction, and social psychology, the team is led by FPA Dean Katherine Graham, under the sponsorship of President Roseann Runte and philanthropist Mrs. Sonja Bata.

Student Support Services

- In early 2009, Carleton University's Student Support Services launched Carleton Complete, an integrated package of initiatives to promote student success, including enhancements in academic advising, training for faculty and staff on student mental health and a Student Experience Office that encourages student engagement on and off campus. Carleton Complete also offers a new co-curricular transcript that recognizes student experience outside the classroom, as well as existing components in community service learning, leadership development, and career support.
- The Career Development and Co-operative Education (CDCE) Office operates an extensive *co-operative education program* placing and supporting about 1,000 students annually and involving almost all the University's undergraduate programs and four graduate programs. The top ten co-op employers in 2007 were: Health Canada, Nortel, CIDA, DND, Canada Revenue Agency, IBM, Environment Canada, Research in Motion, Mxi Technologies and the National Research Council. DFAIT and Cognos were also important employers. The CDCE Office offers Coop 1000, a non-credit course designed to assist students entering the co-op program for the first time. The Office draws on advice from three advisory councils: Student, Faculty and Employer.
- The CDCE Office operates a one-day *Volunteer Marketplace Fair*, which, in 2007, connected 350 students with 25 organizations in the Ottawa area.
- Through its *Employer Services* arm, the CDCE Office liaises with employers across the Ottawa region to support their recruitment of new Carleton graduates.
- Now called the Student Experience Office, the *First Year Experience Office* (FYEO) has helped first-year students make the transition to university by offering a range of services, including community service learning opportunities, mentors for emerging leaders, an Alternative Spring Break, where students apply their classroom knowledge to a community project in an off-site location.
- Actively supported by President Runte, *Carleton Serves* is a week in the latter part of September that encourages Carleton students to volunteer with non-profit organizations in Ottawa. In 2008, 65 students participated along with staff and faculty, supporting the Ottawa Food Bank, the Ottawa East Children's Garden, Options Bytown and the Main Street Farmers. The FYEO matched Carleton volunteers with these and other organizations.
- The *Paul Menton Centre for Students with Disabilities*, which provides support and advocacy for students with disabilities, runs the "Make the Cut" program for high-school students with learning disabilities or Attention Deficit Hyperactivity Disorder who are oriented to enroll in post-secondary institutions. The program is run in partnership with Algonquin College and the Ottawa-Carleton, Renfrew County and Upper Canada school boards.

Volunteer Fundraising

- Each year, the Carleton Cares Committee of staff, faculty and students raise hundreds of thousands of dollars for the *United Way Campaign*, which, in turn, channels these funds through the United-Way system to proven charities in the region.
- With origins 20 years ago in an incident at a homecoming football game, each year

students organize the *Charity Ball* to raise funds for needy community organizations in the Ottawa area. They are advised on options for allocating these funds by the Community Foundation of Ottawa, which manages the money through an ongoing endowment.

Human Resources

- On an annual basis, the Human Resources Department runs an Employee Recognition Program for University staff. One of the awards is the *Community Service Recognition Award*, which in 2008 was won by the FYEO's CSL Coordinator.

Student Bursaries

- Administered by the Faculty of Graduate Studies and Research, two *New Sun Graduate Bursaries* are awarded each year to First Nations, Inuit and Metis students who demonstrate a willingness to use their skills and knowledge in the service of Aboriginal communities; some of the recipients have focused their efforts on groups in the greater Ottawa area.

Student Organizations

- A wide range of *student clubs* raise funds and advocate for social, environmental, human-rights, anti-poverty and other causes, engaging the broader community and Carleton students in campaigns, demonstrations and lobbying.
- Affiliated to 50-year-old AISEC Canada, *AISEC Carleton* organizes conferences and exchanges that promote leadership, cultural exposure and personal growth among students, benefiting from the guidance of its Board of Advisors from business and the professions in the Ottawa region.
- A committee of *Aboriginal and non-Aboriginal graduate students* will host a conference in 2009 on indigenous issues in Canada, inviting participation from community members, Elders and Aboriginal leaders based in the region, as well as those from elsewhere in the country.

Artistic, Cultural and Religious Activities

- *CKCU*, the University's longstanding radio station, provides news, commentary and a wide range of music, through shows produced—and enjoyed— by Carleton students and by members of the Ottawa community. The station's annual fundraising drive relies on many small donations from its listeners across the region.
- Always open to the public, the *Carleton University Art Gallery* exhibits the works of Canadian and international artists and provides a forum for the critical examination of artistic products and discourse.
- *Ottawa's Muslim community* has used the Fieldhouse as a venue for celebrations of the Eid holiday, including a bazaar and children's activities.
- Advising the President, the *Aboriginal Vision Committee*, which works to increase awareness and participation of Aboriginal people on campus, has engaged Elders from First Nation, Metis, and Inuit communities and a local-area drum group, to inform, support and celebrate Aboriginal initiatives on campus.
- A wide range of local cultural groups involved in dance and theatre make regular use of the *Kailash Mital Theatre* for productions that are open to the general public as well as members of the Carleton community.
- Students, staff and faculty affiliated with Carleton's GLBTQ Centre for Sexual and Gender Diversity marched in the *Gay Pride parade* in Ottawa.
- Each fall, the Fieldhouse is also the venue for Ottawa's largest sale of *antique furniture, textiles and jewelry*.

Democratic Participation

- Faculty, staff and students participate vigorously in the *democratic process* in the Ottawa region, through a wide range of political parties, including involvement in elections at all levels, working for riding associations and campaigns and sometimes serving as candidates.

Sports and Recreation

- The most substantial community engagement in the area of sports and recreation by Carleton University is its summer *Sports Camps* for kids of both primary and secondary school age, which have been offered for 34 years, for single and multiple sports. Shorter camps are also run during March break.
- In addition to the Sports Camps, the Department of Recreation and Athletics also runs *adult recreational leagues* in hockey, basketball, volleyball, soccer and other sports for members of Carleton and the broader community alike.
- Three Carleton students who represented Canada at the *Beijing Summer Olympics* have made numerous public appearances in local schools and the community more broadly.
- Coming from all parts of the greater Ottawa region, fans of the *Carleton Ravens men's basketball team* stream into the Raven's Nest for each home game to cheer on this remarkably skilled and successful team.
- In September 2008, more than 1,800 fans of all ages filled the Raven's Nest to watch an intra-squad game of the *Toronto Raptors*, who were completing their training camp at Carleton.
- The *Ottawa Fury professional women's soccer team*, which plays in the United Soccer League and also offers clinics for young players, played and practiced at Carleton University's stadium, drawing fans from the Ottawa area.
- Many Ottawa residents have benefited from the well-known expertise of the *physiotherapy services* based at Carleton.

Obstacles

There is clearly an impressive and continuous flow of people and ideas between Carleton University and many diverse segments of the broader community. However, there also are certain obstacles that limit some of these activities from developing even more fully. One of these obstacles is *parking* on campus, especially its high cost and, too often, its lack of availability. One way of reducing the seriousness of this obstacle is, for priority activities, to provide community partners with free parking, via the use of pre-distributed or online vouchers. Another obstacle is that the university program *cycle and calendar* often has little to do with—and can be completely misaligned with—the cycle and calendar of community partners-organizations. The solution to this is for university stakeholders to simply listen carefully, and look for better ways and means of responding to the cycle and priorities of local institutions and organizations.

Conclusion

Carleton University's institution-wide efforts to connect with and contribute to the community in which it is based are numerous, and diverse, with some activities focused on very particular constituencies in the Ottawa region. There is indeed a robust, continuous flow, in *both directions*, of people and ideas—in ways that generate benefits for all parties. There are some practical obstacles to address in order to improve the effectiveness of this work. At the same time, more detailed research into key streams of engagement activity would be useful in understanding how to deepen and broaden their impacts.

Figure 3

Carleton's Community Engagement: Some Numbers

Recreation and Sports	
Number of children registered in summer sports-camp programs	**3,500**
Number of (non-student) adults registered in recreational sports leagues	**1,200**
Number of fans who watched the Toronto Raptors intra-squad game	**1,800**
CKCU Radio	
Number of people who donate to CKCU each year	**4,500**
Number of people from the community who volunteer with CKCU	**100**
Virtual Ventures	
Number of children attending summer computer camp over seven weeks	**800**
Co-operative Education	
Number of students –undergraduate and graduate-who are registered in a Coop at Carleton	**2,400**
Number of students placed in co-op in 2007-2008	**1,000**
Number of industry partners in co-op program	**1,500**
Number of students enrolled in the preparatory course, COOP 1000	**850**
First Year Experience Office	
Number of undergraduate students serving as volunteers	**100**

Focus on the Faculties: Engagement Through Teaching, Research and Service

To better understand the nature and breadth of Carleton University's engagement with the Ottawa region, it is necessary to "drill down", across all Faculties, into the activities of individual professors, courses, research centres and projects, outreach programs and student organizations. The next five chapters summarize the findings of ICUE's website research for each of the University's teaching Faculties: Arts and Social Sciences, Business, Engineering and Design, Public Affairs and Science.

This is the first attempt to produce an inventory of Carleton's community engagement activities by Faculty. Since this research is based on existing online sources and is not a comprehensive census of all professors and programs, there are likely considerable gaps in the data. Nonetheless, our research has identified more than 140 faculty members who are engaged in some meaningful way with local organizations, either through their teaching, research or volunteer work – or in some cases, all three of these channels. We have also identified 50 community-oriented, experimental learning opportunities, internships, practiums, and field-based courses which offer students degree credits; these are found across all five faculties, in addition to Carleton's extensive university-wide, paid co-op program. The research also uncovered a rich array of outreach activities that has evolved within each Faculty. Finally, the research indentified more than 20 student

organizations that have made significant, and often very innovative, contributions to local charities and non-profit.

The composite picture painted in these next five chapters is of a university that is deeply engaged with the broader community in which it is located. Carleton faculty members study, advise, consult to and volunteer with a remarkable array of local institutions, from social-justice charities to symphony orchestras, federal departments and software firms. The University also offers a long menu of courses in every Faculty that put students into the community to both learn and contribute-studying water quality, evaluating training programs, designing health-care devices and computing financial projections. Carleton professors and students invite high-school teachers and students and outside professionals onto the campus to share research and build relationships. Some faculties sponsor learning camps and competitions for children and teens. And student organizations get involved too, by raising awareness and funds for social and environmental causes in the community. Indeed, each Faculty has developed a set of best practices, which are also highlighted in the pages to follow. Taken together, the critical mass of interactions between the university and the Ottawa region is remarkable, even breathtaking, in its diversity and scope. Carleton University and Ottawa should be very proud of their many partnerships and joint achievements.

However, there is little evidence to indicate that the development of "CUE" capacity within Faculties has been carried out systematically. Rather, units within Faculties rarely coordinate their engagement efforts, share experiences or methods, or, in some cases, are even aware of one another's work in this field. And this is to say nothing of the need for coordination *across* Faculties.

If Carleton is to increase the effectiveness and efficiency of its community engagement, it must do three things: First, it must complete the work begun by ICUE by undertaking a comprehensive survey of *all* of its CUE activities. Second, the University must improve its coordination internally, within and across Faculties. Third, Carleton must strengthen its external cooperation with local institutions to create more comprehensive, longer-term partnerships.

The Faculty of Arts and Social Sciences

Dean: John Osborne

Numbers
Undergraduate Students 6,234
Graduate Students 650
Faculty 302
Staff 75

Programs
Bachelor of Arts
Bachelor of Music
Bachelor of Humanities
Bachelor of Arts (Honours)
Bachelor of Arts (Combined Honours)
Master's Programs 17
PhD Programs 8

Faculty Contributions to the Community

- *Faculty Dean John Osborne* has participated in a panel to explore cooperation with the Community-Based Research Network of Ottawa.
- *Prof. David Gardner* (Humanities) is Principal Cellist in the Ottawa Symphony Orchestra, and its former Board Chair.
- Outside of academia, *Prof. Angela Sumegi* (Humanities) teaches Buddhist meditation and is the founder of a charity that supports Tibetan refugee children in India.
- *Rabbi Reuven Bulka* (Humanities) is a prominent leader in the Jewish community in Ottawa, serves on the religious advisory boards of the United Way and Canadian Blood Services, and hosts a weekly radio call-in program.
- *Prof. Mina Cohn (*Humanities) has developed curriculum for teaching Hebrew in the Canadian Armed Forces, and is involved in the Foreign Language institute of Ottawa.
- *Prof. Kate Oakley* (English) is a mentor for the Shad Valley program.
- *Prof. Sinclair Robinson* (English) serves as translator for INSCAN, a Carleton-based quarterly publication on immigrant and refugee issues.
- *Prof. Patricia Ballamingie* (Geography and Environmental Studies) researches engaged scholarship and sustainable community, integrates service learning into undergrad courses, and is a key member of Carleton's Batawa team.
- *Prof. Fran Klodawsky* (Geography and Environmental Studies) active with the Knowledge Transfer Table of the city's No Community Left Behind initiative, co-directs a multidisciplinary, longitudinal study of the experience of homeless persons in Ottawa and another project on diversity and gender in decision-making processes in municipal government.
- In addition to her work on adaptive co-management and environmental justice in Canada's north, *Prof. Nancy Doubleday* (Geography and Environmental Studies) has worked on the issue of taking of water from the Tay River near Perth, and sits on Carleton's Social Innovation Advising Committee.
- *Prof. Steve Prashker* (Geography and Environmental Studies) coordinates the fourth-year Geography Practicum and the third-year Honours Field Course.
- *Prof. David Bennett* (Geography and Environmental Studies) studies the disablement process of persons with Multiple Sclerosis in Ottawa and other cities.
- *Prof. Scott Mitchell* (Geography and Environmental Studies) is active in the Ottawa chapter of the Open Source Geospatial Foundation.
- *Prof. David Dean* (History) served as the resident historian for "The Great Frost of 1608," a theatrical production at the National Arts Centre.
- *Prof. Bruce Elliott* (History) has worked on student projects on gravestones at Beechwood Cemetery, advised the City of Ottawa and Community Foundation of Ottawa on conservation and usage of a heritage home, and volunteers with several local history and heritage groups.

- *Prof. Chris Herdman* (Philosophy) advises government and industry on how to design advanced displays for aircraft and vehicles.
- *Prof. Bernadette Campbell* (Psychology) has worked on evaluations of federally-funded, community-based and school-based programs on youth-drug prevention, alcohol-harm reduction and welfare reform policies.
- A frequent resource person in workshops for teachers on anti-bullying initiatives, *Prof. Tina Daniels* (Psychology) chairs the Ottawa Anti-Bullying Coalition, a group of more than 50 community members.
- *Prof. JoAnne Lefevre* (Psychology) produces a newsletter for parents as a way of disseminating key findings from her research with other scholars and the Canadian Child Care Federation on early numeracy and pre-reading skills among young children.
- *Prof. Gitte Lingaard* (Psychology) studies human interaction with computers and is a mentor for the Shad Valley program.
- *Prof. Robert Coplan* (Psychology) conducts research on childhood shyness in local elementary schools.
- Recognized with a City of Ottawa award for civic volunteerism, and former Chair of the Greenspace Alliance of Canada's Capital, *Prof. Shelley Parlow* (Psychology) is involved in pediatric research at two local hospitals.
- A mentor for the Shad Valley program, *Prof. Avi Parush* (Psychology) studies Operating Room simulations in collaboration with the Ottawa Heart Institute and the Ottawa Hospital.
- *Prof. Donna Patrick* (Sociology) focuses her SSHRC-funded research on multi-literacies and community building among urban Inuit in Ottawa.
- In addition to their extensive, IDRC-funded action-research in Asia and Latin America, *Prof. Jacques Chevalier and Prof. Daniel Buckles* (Sociology) train Ottawa-based development consultants, NGO managers and policy-makers in applying the tools of the Social Analysis System approach to poverty reduction and social-justice projects overseas.
- *Prof. Katherine Arnup* (Canadian Studies) volunteers in a residential hospice that provides end-of-life care.
- *Prof. Michael Bussiere* (Art and Culture) developed the popular, interactive computer music sculpture commissioned by the Regional Municipality of Ottawa-Carleton and located at Festival Plaza.
- *Prof. David MacAdam* (Art and Culture) founded the Ottawa Pocket Opera, which makes opera accessible to the public through its performance in public spaces.
- Active as a guest curator for museums, archives and festivals around the world, *Prof. Mark Langer* (Art and Culture) served in this capacity at the Ottawa International Animation Festival.
- For two decades, *Prof. Bryan Gillingham* (Art and Culture) has served as Director and General Editor of the Ottawa-based institute of Mediaeval Music.
- *Prof. Leliani Farha (*Interdisciplinary Studies) organized a workshop for students and community workers on housing concerns in Ottawa.

Community-Based Learning Opportunities

- A wide range of FASS departments offer paid *co-operative placements* to upper-year undergraduate students and to graduate students, as well as paid and unpaid internships and practica with organizations in the Ottawa region.
- Through the *Mentorship Program* of the College of the Humanities, every B. Hum student who chooses this option is matched with a mentor, a poet, artist, writer, diplomat, businessperson, public servant, politician or academic.
- Geography and Environmental Studies offers a *Fourth-Year Practicum* that assigns students to work for one day a week in government and the private sector.
- Geography and Environmental Studies also runs a *Third-Year Honours Field Course*, often undertaking projects with municipal offices in the Ottawa region and Eastern Ontario, on

town planning, environmental issues, tourism and other topics.

- public historians between their first and second year.
- The Department of Psychology offers a *Practicum in Social and Organizational psychology* to third-year students, as well as a practicum option for graduate students.
- The Department of Sociology and Anthropology offer *internships to graduate students* to work in museums, government departments (eg. Statistics Canada, Health Canada) and non-governmental organizations on projects related to their thesis topics.
- The School of Canadian Studies offers a *Third-Year Practicum Placement* to provide students with hands' on work experience in an institutional setting in the Ottawa area.
- In its Certificate in the Teaching of English as a Second Language, the School of Linguistics and Applied Language Studies requires that students take a *Practicum in Teaching English as a Second Language*, which includes observation in ESL classes and assistance with teaching materials or teaching classes themselves.
- In the *Practicum Program of the School for Studies in Art and Culture*, third- and fourth-year students are placed in cultural institutions around Ottawa, working under the direction of many of Canada's leading experts in the field.
- The Institute of Cognitive Science also offers a *coop option* its students.
- The Pauline Jewett Institute of Women's Studies offers two *Fourth-Year Practicum Courses* that offer students opportunities to participate in social activism through the application of feminist knowledge in practicum placements in institutions in Ottawa.
- The Institute of Interdisciplinary Studies permits *Child Studies students* to register in the Psychology practicum courses if students work at a job they haven't done previously.
- In an idea borrowed from medical training known as *methodology rotations,* the
- The Department of History offers fully-paid *summer internships* to MA students to work as Institute of Cognitive Science requires its PhD students to spend one term each in a laboratory or other research venue of an organization engaged in one of three cognitive-science disciplines (in fact, students can select from four disciplines: Psychology, Philosophy, Linguistics and Computer Science).

Community and Public Outreach

- The Department of English Language and Literature runs *a High School Writing Contest* for short stories, poetry, plays or television scripts and literary essays.
- The Department of Geography and Environmental Studies has hosted the *Keen for Green Summer Camp*, with the support of Virtual Ventures and the Community Foundation of Ottawa.
- The same Department works with the Library to hold a *Geomatics and Geographic Information Systems Day*, an event that is open to the public featuring GIS companies and other organizations which are often represented by Carleton alumni.
- The Department of Psychology maintains ongoing liaisons with *research facilities* throughout Ottawa that enable faculty and students to carry out collaborative research projects with scientists in federal departments, research institutions, hospitals and companies.
- The Psychology Department's *Police Research Lab* explores how psychology can contribute to police activities.
- The *Centre for Initiatives in Education* runs a wide range of programs serving the educational needs of key groups in the community, including a bridging program into university studies for mature students (via separate classes for men and women); non-credit courses for retired, semi-retired and lifelong learners; a high school mentoring program that sends Carleton students to work as peer mentors in Ottawa high schools with students and staff, including a new Aboriginal project; and the Enriched Support Program

and Aboriginal Enriched Support Program for students with university potential and interest but who don't meet traditional entrance requirements.

- In the College of the Humanities, the *Centre for the Study of Islam* engages the local community through public lecture series, seminars, symposia and short, non-credit courses.
- The *Max and Tessie Zelikovitz Centre for Jewish Studies* offers public learning activities—particularly through its "Week of Jewish Learning"—in partnership with other organizations.
- Using workshops, case studies and other interactive methods, the Centre on Values and Ethics offers a *Certificate in Organizational Values and Ethics* for professionals in the public, private and non-profit sectors in the Ottawa region.
- The *Centre for Applied Research* worked with the Department of National Defence Tactical Aviation Mission System project and Ottawa companies to develop models of situational awareness to improve mission effectiveness.
- Partnering with Rockcliffe Flying Club and Algonquin College, the *Advanced Cognitive Engineering (ACE) Lab* studies how age-related changes affect flight performance in recreational pilots. ACR Lab also cooperates with private companies, DND, Transport Canada and other departments and agencies headquartered in Ottawa in research on unmanned air vehicles, cell phone use in cars, "heads' up" displays on vehicles and aircraft, civil air search and rescue, and flight simulation.
- Another research centre, the *Centre for Advanced Studies in Visualization, Simulation and Modelling* (VSIM), works with 15 industry partners on a wide range of research projects related to civil and military aviation. An associate of VSIM has also worked on flight simulation projects with high schools in Eastern Ontario.
- *The Human Oriented Technology* (HOT) *Lab*, which studies the interaction of humans and computers, benefits from guest lectures by representatives of its partner companies and institutions (eg. Cognos/IBM, NRC, Statistics Canada) and opportunities for students to link their theses with company projects.
- Affiliated with the University of Ottawa, the Institute for Mental Health Research and the Royal Ottawa Hospital, the *Centre for Research on Stress, Coping and Well-Being* has carried out research on the social and psychological impacts on workers of downsizing in the local high-tech sector.
- *The Social Capital and Health Lab* is investigating, through a longitudinal study, the links among job loss in the manufacturing sector, financial stress and physical and mental health in Smith Falls and Renfrew; this project is supported by both town councils.

Student Organizations

- Produced by students in Geography and Environmental Studies, *"Spaces, Places and Faces"* is a weekly show broadcast on CKCU radio and via cable and the internet on issues at the intersection of human beings and the environment, including identity, climate change, homelessness, wind power and other topics.
- The *Miss G_ Project for Equity in Education*, promoted by students in the Pauline Jewett Institute of Women's Studies, is a grassroots organization fighting against sexism, homophobia, racism and classism in the education system.
- Some individual students in FASS are active *volunteers for non -governmental organizations* (eg. Nature Canada), sometimes becoming financial donors to local charities (eg. Shepherds of Good Hope), and frequently focus their research on problems of direct relevance to the Ottawa region (such as conditions facing workers in "precarious employment", and factors affecting Aboriginal mental health).
- One former student in the Institute of Cognitive Science organized a national youth conference on climate change in 2005, and

now operates a website (www.yc3.net) that is a vehicle for information, discussion and action on climate change. She is also planning a mentors program for young people seeking to pursue careers in sustainability.

Opportunities Going Forward

- Preparation of a full and detailed *inventory* for the Faulty of community engagement by faculty members, through teaching, research and volunteering.
- Encouraging faculty working on community-oriented initiatives nationally and internationally to *increase their activities in the Ottawa region.*
- Among interested departments, schools and institutes, promotion of *cross-unit exchange* of methods and experiences in the delivery of field-based courses and other forms of experiential learning.
- In conjunction with Student Support Services and with other Faculties, strengthen cross-unit *coordination* of course and research engagement with local institutions in all sectors.
- Increased capacity in the Faculty in *community-service learning* strategies and methods in the program-delivery cycle, from recruitment through planning implementation and evaluation.
- Continuing and deepening the multi-channel engagement with *Aboriginal communities* and citizens in the Ottawa region in particular.
- Coordination of teaching and research engagement with *municipalities in Eastern Ontario*.
- Encouraging *student organizations* to promote co-curricular service projects that provide assistance to non-profit organizations in the community, particularly those working with youth and with the elderly, with Aboriginal organizations, in the arts and culture fields, and on environmental issues.

Best Practices

- **Faculty Contributions:** Faculty community engagement through teaching, research and volunteering that strengthens Carleton's relationship with arts, culture and research organizations in Ottawa, and with municipalities in Eastern Ontario.
- **Community-Based Learning:** A wide range of field-based practicums for upper-year undergraduate students, plus methodology rotations for doctoral students.
- **Community and Public Outreach:** An array of outreach programs aimed at high school students, mature students, lifelong learners and retirees; and multiple research partnerships with Aboriginal communities, focusing on mapping, traditional music and dance, indigenous knowledge and natural-resource management and the environment, and including detailed knowledge of Inuit organizations and learners in Nunavut and Ottawa.
- **Student Organizations:** Production of media shows on the environment and lobbying against discrimination in education.

Annex A
FASS Faculty Involved in Community-Relevant Research Outside the Ottawa Region

Northern Canada

- In addition to his research partnerships with First Nations and government agencies in the Yukon, *Prof. Chris Burn* (Northern Research Chair) helps with the Cape Farewell Youth Expedition, an international climate-change awareness program for 28 international students (including 16 Canadians) involving top scientists, artists and educators.
- Exploring human-environment interactions at local and regional scales, *Prof. Gita Laidler* (Geography and Environmental Studies) works with three communities in Nunavut.
- Supported by Inukshuk funding, *Prof. Claire Dormann* (HOTLab) is testing Geo-wiki tools wherein players in Nunavut can edit maps online.
- *Prof. Elaine Keillor* (Psychology) creates web-based learning environments for youth in the James Bay Cree area to learn about their traditional and contemporary cultures.
- *Prof. Claudio Aporta* (Sociology) studies Inuit hunter navigation on sea-ice in Nunavut.
- An internationally recognized expert in cybercartography, *Prof. Fraser Taylor* (Geography and Environmental Studies) is developing digital maps of Canada's trade with the world. The *Geomatics and Cartographic Research Centre*, which Prof Taylor directs, applies cybercartographic methods to Inuit sea ice use in Nunavut and to Nunavut heritage issues, as well as to Aboriginal art and culture in the Great Lakes region. The Centre is also preparing an interactive atlas of the risk of homelessness across Canada.
- Spanning both northern and non-northern Aboriginal communities, and led by *Prof. Marie Odile Junker* (SLALS), the Canadian Aboriginal Research Database is a searchable website of 3,000 entries on First Nations' music and dance, and is the main project of the *Centre for Indigenous Research, Culture and Language*.

Canada-Wide

- *Prof. Dan Patterson* (Geography and Environmental Studies) works on geomatics education at the K-12 and post-secondary levels.
- A member of the *National Wildlife Research Centre* at Carleton, *Prof. Birgit Braune* (Geography and Environmental Studies) coordinates contaminants monitoring research for Environment Canada.
- A specialist in Paleoecology, *Prof. Michael Pisaric* (Geography and Environmental Studies) works with colleagues across the country to integrate the traditional knowledge of the Vuntut Gwitchin with Western science.
- *Prof. Christopher Davis* (Psychology) is examining the impact of the Westray Mine tragedy in Nova Scotia on local community members.
- *Prof. Connie Kristiansen* (Psychology) is investigating the causes and consequences of violence against women and children, as well as the long-term effects of women in conflict with the law.
- *Prof. Andrea Doucet* (Sociology) studies the involvement of fathers in parenting in the context of their communities.
- *Prof. Louise de la Gogendiere* (Sociology) conducts research on the Ghanaian diaspora in Canada and their links to development in Ghana.
- Based at Statistics Canada, *Prof. Paul Reed* (Sociology) studies the foundation of community and social infrastructure, altruism and the voluntary sector.
- *Prof. Xiaobei Chen* (Sociology) carries out research in Canada and China on transnational adoption and on the gendered and rationalized nature of the politics of citizenship.
- *Prof. Margaret Dinike* (ISLAC) has been a member of the National Association of Women and the Law and the Women's Legal Education and Action Fund, and an advisor to the Law Commission of Canada.
- *Prof. Allan Ryan* (New Sun Chair) has produced a guide for the National Film Board on Aboriginal film and video in Canada; the guide will be translated and disseminated across Latin America.
- *Prof. Marie-Odile Junker* (SLALS) has developed interactive East Cree Syllabic Lessons for the residential school generation who can speak but not read their mother tongue.
- *Prof. Hymie Anisman* (CRC Neuroscience) and *Prof. Kimberly Matheson* (Vice-President Research) are studying the effects of day-to-day discriminatory events on the health, well-being and quality of life of Canadian social groups.
- *Prof. Shawn Hayley* (CRC Neuroscience) experiments with treatments for neurodegenerative diseases such as Parkinson's and Alzheimer's.
- *Prof. Janna Fox* (Linguistics and Applied Language Studies) examines the impact of the Ontario Secondary School English Language Test on Second-Language students.
- *Prof. Tullio Caputo* and *Prof. Katharine Kelly* (both from Sociology and Anthropology) co-direct the *Centre for Initiatives in Children, Youth and Community*, which carries out multi-level research with government departments and communities across Canada on community safety, crime prevention and youth gangs.
- *Prof. Del Muise* (History) participates in the "Canadians and their Past" CURA project, which uses research to promote the consciousness of history among Canadian communities and citizens.

International

- *Prof. Pauline Rankin* (Associate Dean) serves as an advisor on gender equality on CIDA-funded projects in China, Bangladesh, Georgia, Armenia and Azerbaijan.
- *Prof. Derek Smith* (Geography and Environmental Studies) facilitates participatory mapping of indigenous wildlife use in western Panama.
- *Prof. Michael Brklacich* (Geography and Environmental Studies) is active in global

research networks on environmental change, human security and food systems.

- *Prof. Fiona Mackenzie* (Geography and Environmental Studies) studies the environmental struggles of communities over land in the Outer Hebrides of Scotland.
- *Prof. Jay Drybyk* (Philosophy) teaches ethics in international development and is President of the International Development Ethics Association.
- *Prof. David Matheson* (Philosophy) participates in the Identity Trail, an international, multidisciplinary project on changing notions of privacy, identity and anonymity.
- A specialist in foreign domestic workers, *Prof. Daiva Stasiulis* (Sociology) has chaired the UN Expert Group on Violence Against Migrant Workers.
- Currently researching the experiences of immigrant physicians and nurses in Canada, *Prof. Jan Pylypa* (Sociology) has also studied women's health and cervical cancer in northeast Thailand as well as the health of migrant workers from Mexico in the United States.
- *Prof. Wallace Clement* studies the interaction of class and gender in post-industrial work in Canada and five other OECD countries.
- *Prof. Ruth Phillips* (ICSLAC) works with a research alliance of museums, universities and Aboriginal communities in Canada, the US and Europe focused on Aboriginal art and culture.
- *Prof. Eva Mackey* (Canadian Studies) carries out research on the land- rights negotiations of members of the Six Nations straddling both Ontario and New York State.
- *Senator Landon Pearson*, founder of the Landon Pearson Resource Centre, directs research and organizes conferences of young people on the United Nations Conventions on the Rights of the Child.
- *Prof. Bill Skidmore* (Interdisciplinary Studies), whoc teaches human rights, conducts field research with civil-society organizations on forms of repression and torture in the Middle East and elsewhere.

The Sprott School of Business

Dean: Jerry Tomberlin

Numbers
Undergraduate Students 1,965
Graduate Students 180
Faculty Members 48
Staff 27

Programs
Bachelor of Commerce
Bachelor of International Business
Master of Business Administration (Four Concentrations)
Doctor of Philosophy

Co-op Placement Partners
Alcatel-Lucent, Canada Post, Deloitte, Ernst and Young, Export Development Canada, Industry Canada, KPMG, Microsoft, Nortel, PriceWaterhouseCoopers, Public Works, Raymond Chabot, FINTRAC, Telus

Faculty Contributions to the Community

- *Prof. François Brouard*, Director of the new Sprott Centre for Social Enterprises, studies social entrepreneurship in the non-profit sector in Ottawa, Montreal and other centres, advises the Canadian Association of Family Enterprise, and is helping to organize a local conference on corporate social responsibility.
- Cross-appointed to Engineering, *Prof. Tony Bailetti* works with Volunteer Ottawa on open-source telecommunications solutions for charities and non-profits, and promotes local technology companies through the Talent First Network.
- A well-known specialist in work-family balance, human resource management and organizational change, *Prof. Linda Duxbury* advises business associations and the federal government and comments frequently in the Ottawa and national media on these subjects.
- *Prof. Lorraine Dyke*, Director of the Centre for Research on Women and Work, studies gender differences in career strategies and workplace diversity in the public and technology sectors in Ottawa.
- Information systems specialist *Prof. Gerald Grant* is a member of the advisory board of the Ottawa Manufacturers' Network.
- A specialist in marketing and management, *Prof. Louise Heslop* has been active in civic organizations in the Almonte area.
- *Prof. Moses Kiggundu* in addition to his extensive advisory work with international-development organizations, promotes equality in partnerships on climate change and other development issues between Aboriginal groups and Canadian society at large.
- *Prof. Uma Kumar* serves as a consultant to CIDA, the Department of National Defence and the Canadian Association of Business Incubators.
- *Prof. Vinod Kumar* carries out research in the region supported by the Ontario Research Network for E-Commerce.
- *Prof. Aaron Nsakanda* has advised Nav Canada on staff planning for the company's flight information centres.
- An international expert in place-based branding, *Prof. Nick Papadopoulos* advises governments at all levels and trains executives in the Ottawa area.
- Through her teaching in the B.Com program, *Prof. Linda Schweitzer* facilitates action research on the organizational learning of locally-based businesses and other organizations.

Community-Based Learning Opportunities

- The B.Com program offers an extensive *co-operative placement option* of four-, eight- or twelve-months' duration, in which students work for and are paid by major companies and government agencies in the Ottawa region.
- Students in the fourth-year course on *organizational learning* are required to work in teams to identify an organization (private, public or non-profit) and assess its capacity as

a learning organization, through both primary and secondary research.

- In the *practicum in management* course, fourth-year students work in two-person consulting teams with Ottawa-based organizations, preparing consulting proposals and undertaking studies, under the joint mentorship of the course instructor and client representatives.
- Since 1992, the Centre for Research on Women and Work has delivered its signature program, the *Management Development Program for Women*, which to date has trained nearly 500 managers and professionals working in the public and private sectors. Major government departments, companies and associations sponsor candidates for the program, provide guest speakers and are represented on the program's advisory board.
- The *professional training* arm of the Sprott School offers a wide range of short courses and workshops directed to executives, managers and professionals in the Ottawa region, often in partnership with professional associations.

Community and Public Outreach

- The *Mind Trust Leadership Program* provides 50 business students from the Sprott School and the University of Ottawa with a special opportunity to interact with successful Ottawa-based chief executives in the technology sector on the real strategic and operational challenges and solutions in today's business world.
- In 2008, 12 third- and fourth-year B.Com students provided accounting advice to three local area charities at a special *tax clinic* organized by the Sprott School, the Sprott Accounting Students' Association and Carleton's Centre for Voluntary Sector Research and Development.
- *Biz Camp* is a free, three-week summer camp aimed at fostering entrepreneurial skills in aspiring youth between the ages of 14 and 17. Product-development, marketing, team-building and self-esteem are among the skill-sets developed by campers.
- The Sprott School also organizes an *annual professional day with high school teachers of business*, who are invited to tour Sprott facilities and classrooms and participate in faculty presentations. This event strengthens the School's relationship with area teachers who, in turn, can better prepare their students for Carleton courses.
- The *Sprott Business Competition* engages Ottawa high-school students in an online game calling for senior-management decision-making for a virtual firm in a virtual industry.
- In order to carry out its research program, the *Research Centre for Technology Management* has attracted funding support from granting councils and developed partnerships with companies, crown corporations and government departments.
- Combining the fields of both business and engineering, the *Manufacturing Systems Centre* works with industry and government to develop models for enhancing manufacturing productivity.
- In late 2008, the School approved the new *Sprott Centre for Social Enterprises*, which plans to work closely on joint research projects with other Carleton colleagues and social entrepreneurs in the non-profit sector, both locally and nationally.
- The Sprott School retains an *External Relations Officer* to promote deeper and wider outreach activities.

Student Organizations

- Several student organizations in the Sprott School—including the *Sprott Business Students Society, the Sprott Finance Students Association and the Sprott Information System Students Association*—organize networking events with Ottawa-based industry representatives in their respective fields of interest.
- *ACE Carleton,* which organizes student teams to learn about and contribute to entrepreneurship, has helped parents find

affordable child care, taught marketing to high-school students, and enabled local businesses to advertise jointly through a coupon booklet. In another project, ACE members sold customized dog-tags to raise awareness about war and violence, and channeled the proceeds to Harmony House, a shelter for abused women in Ottawa.

Opportunities Going Forward

- *Expanding co-op opportunities* with local companies and agencies for a larger contingent of graduate students over the next five years.
- Increasing the availability of seats in B.Com and MBA courses that offer *practicums, action-research and service-learning opportunities.*
- Supporting the growth and increased impact of Sprott *research centres* in the fields of women and work, social enterprise, technology management, and manufacturing systems.
- Continuing the multi-channel engagement *with high school teachers and students* through Biz Camp, the Business Competition, and the professional day with teachers.
- Encouraging *student organizations* to promote co-curricular service projects that provide assistance to and raise funds for non-profit organizations in the community.

Best Practices

- **Faculty Contributions:** Joint projects with Ottawa-area companies and business and professional associations, through action-oriented research, teaching, consulting and volunteering.
- **Community-Based Learning:** Student opportunities to work with local business and organizations on organizational learning and management, and professional development for women managers and professionals in the public and private sectors.
- **Community and Public Outreach:** Multi-channel engagement with high-school teachers and students through a summer camp, business competitions and annual teacher days.
- **Student Organizations:** Provision of advice and fundraising for local non-profits and charities.

The Faculty of Engineering and Design

Dean: Rafik Goubran

Numbers
Undergraduate Students 2,764
Graduate Students 871
Faculty Members 139
Staff 58

Programs
Bachelor of Engineering 12 Programs
Bachelor of Architectural Studies
Bachelor of Industrial Design
Bachelor of Information Technology
Master of Engineering 9 Programs
Master of Architecture
Master of Design
Doctor of Engineering 5 Programs

Faculty Contributions to the Community

- *Prof. Feridun Hamdullahpur* (Vice-President Academic and Provost) has served as Chair of the Ottawa Centre for Research and Innovation as well as Chair of TRIUMF Canada and of the Ontario Council on University Research.
- Faculty Dean *Prof. Rafik Goubran* leads a research project entitled Technology-Assisted Friendly Environment for the Third Age (TAFETA), which test the application of sensors as artificial intelligence systems to monitor the physiological and behavioural changes of seniors in their homes, working in cooperation with Elizabeth Bruyere Hospital, the project aims to develop technologies that will enable older adults to stay in their homes longer.
- *Prof. Steen Sjolander* (Civil and Environmental) works on small-engine design in conjunction with Pratt and Whitney.
- The program coordinator of Women in Science and Engineering,(WISE), *Prof. Banu Ormeci* (Civil and Environmental), Canada Research Chair in wastewater and public health, uses provincial funds to expose high-school girls to engineering.
- *Prof. Jacques Albert* (Electronics) works on photosonic sensor devices, in partnership with LxSix Photonics.
- *Prof. Tarik Kaya* (Mechanical and Aerospace) carries out research funded by the Canadian Space Agency, Defence Research and Development Canada, as well as NASA and the US National Research Council.
- A specialist in maritime helicopters operating in severe weather conditions on ships, *Prof. Rob Langlois* (Mechanical and Aerospace) is a member of the Canadian Aeronautics and Space Institute, based in Kanata.
- *Prof. Rong Liu* (Mechanical and Aerospace) carries out research on fracture mechanics with Pratt and Whitney, Delore Stellite and the National Research Council.
- Appointed a Commissioner of the Canadian Nuclear Safety Commission, *Prof. Moyra McDill* (Mechanical and Aerospace) has been an active supporter of networks encouraging young women to get involved with engineering, notably Go Eng Girl!, which organizes events for girls in grades seven to ten and their parents.
- *Prof. Glenn McRae* (Mechanical and Aerospace) is an Adjunct Researcher based at Atomic Energy of Canada.

- *Prof. Fred Nitzsche* (Mechanical and Aerospace) is an investigator in a DND-sponsored program to increase the life of the structure of the CF-18.
- *Prof. Henry Saari* (Mechanical and Aerospace) is a member of the executive of the Ottawa Valley Chapter of the American Society for Materials-International.
- *Prof Fred Afagh* (Mechanical and Aerospace) works on smart materials technology, with the Canadian Space Agency and the National Research Council.
- The materials-related research of *Prof. Jonathan Beddoes* (Mechanical and Aerospace) is supported by Natural Resources Canada, National Research Council, Pratt and

Whitney, Alcan and Materials and Manufacturing Ontario.

- A recipient of the Petro-Canada Young Innovators Award, *Prof. Junjie Gu* (Mechanical and Aerospace) founded the Carleton Student Branch of the American Society of Heating, Refrigerating and Air-Conditioning Engineers.
- Working with *Prof. Paul Straznicky* (Mechanical and Aerospace) and his students, Sander Geophysics Ltd., an Ottawa-based company, built a small, unmanned air vehicle for use in challenging missions close to the ground.
- A specialist in biomedical engineering, *Prof. Adrian Chan* (Computer and Systems) is the faculty representative on the Carleton University chapter of Engineers Without Borders, a board member for the Virtual Ventures summer program, a frequent speaker at high school events, and Director of the Shad Valley program at Carleton, a four-week summer enrichment program for high school students.
- A specialist in unlicensed broadband wireless systems, *Prof. Florence Danilo-Lemoine* (Computer and Systems) works with Nortel Networks and teaches at Carleton as an Adjunct Professor.
- *Prof. Chung-Horng Lung* (Computer and Systems) studies software architecture and network traffic with the support of Alcatel, Nortel, Cistel and NSERC.
- Former Carleton President (Pro-Tem) and Faculty Dean *Prof. Samy Mahmoud* (Computer and Systems) is a member of CANARIE and has led major research initiatives involving companies and government research labs (CRC, NRC, etc).
- Collaborating with Precise Software Technology of Ottawa, *Prof. Shikharesh Majumbar* (Computer and Systems) has developed a tool for task allocation and scheduling in multiprocessor-based real-time systems.
- *Prof. Ashraf Matrawy* (Computer and Systems) has worked closely with CITO and Ottawa-based Solana Systems to evaluate network information assurance using quantitative metrics.
- Adjunct Research *Prof. Sami Aly* (Computer and Systems) is a volunteer with the Ottawa Mission, Engineers Without Borders, Canadian Executive Service Overseas, Child Haven International and Chandroday Secondary School in Nepal.
- *Adjunct Prof. David Hutchinson* (Computer and Systems) is a principal with Pteran Computing Inc, which provides consulting services to government and industry.
- *Adjunct Research Prof. Shalini Periyalwar* (Computer and Systems) is a consultant at SHAPE Innovations Inc, which specializes in advanced wireless technologies and applications.
- *Adjunct Prof. George Oy Mayu Yee* (Computer and Systems) is a computer security specialist working with the National Research Council.
- A Clinical Scientist at Elizabeth Bruyere Hospital, *Adjunct Prof. Frank Knoefel* (Computer and Systems) is a co-founder of the TAFETA smart apartment project.
- *Prof. Len MacEachern* (Electronics) works on performance-optimized circuit design, and his work has appeared in the products of Mitel, Philsar, Skyworks and Conexant.
- A co-founder of the Ottawa-Carleton Institute for Biomedical Engineering, *Prof. Andy Adler* conducts research on low-cost monitoring systems, including a medical imaging technique that creates a three-dimensional image of biological processes.
- *Prof. Yuu Ono* (Computer and Systems) undertakes research on a postage-stamp-sized heart sensor in conjunction with the National Research Council.
- A member of the Carleton University Social Innovation Advisory Committee, *Prof. Tony Bailetti* (Computer and Systems) works with the Social Planning Council and Volunteer Ottawa on open-source solutions to telecommunications and other
- An active member of the Carleton project team for Batawa, *Prof. Sheryl Boyle* (Architecture and Urbanism) has overseen

student design projects at the former Ogilvie Department Store building on Rideau Street and the Thompson-Perkins Mill site near the Portage Bridge.

- *Prof. Stephen Fai* (Architecture and Urbanism) has consulted on renovations to Convent Filles des Sagesse and the addition to St. James Anglican Church.
- Part-Time Instructor *Prof. Jim Mountain* (Architecture and Urbanism) runs a workshop on heritage conservation focused on real projects in Ottawa neighbourhoods and the Ottawa Valley, working closely with local owners and community organizations.
- An expert in art and design in architecture, retired *Prof. Nan Griffiths* (Architecture and Design) has been active in a range of committees and organizations in the City of Ottawa, including the Ottawa Art Gallery and Centretown Citizens Association.
- Part-time Instructor *Prof. Jonathan Westeinde* (Architecture and Urbanism) is a founder of the Windmill Development Group, a LEED-certified green developer.
- Part-time Instructor *Prof. Ajon Moriyama* (Architecture and Urbanism) is Managing Partner at Moriyama and Teshima Architects and, among other projects, contributed to the Canadian War Museum.
- Former Part-time Instructor *Prof. John Abel* (Architecture and Design) serves as a Director in the National Capital Commission.
- An expert in interior design—for residences, commercial properties and even space stations—the School of Industrial Design's Director, *Prof. Tom Garvey,* is a key member of the Carleton-Batawa project.
- *Prof. Lois Frankel* (Industrial Design) has involved students in design projects for the frail elderly (eg. bathtub seats, dietary management aids, stove safety control system, etc) in research related to the Smart Apartment/TAFETA project.
- Adjunct *Prof. Tim Moore* (Industrial Design) is President of Ergosum Ltd., a human-factors consulting company.
- Contract Instructor *Prof. Martien De Leeuw* (Industrial Design) is a member of the Glebe-St. James Council.
- Contract Instructor *Prof. Gregory Abraszko* (Industrial Design) owns Visualfactors, a company specializing in 3-D and virtual reality environments.
- A specialist in security and wireless networks, *Prof. Richard Yu* (Information Technology) consults to the Communications Research Centre, Defence Research and Development Canada, and private companies.
- *Prof. Ashraf Matrawy* (Information Technology) collaborates with Solana Networks and CITO on evaluating network information assurance and with Alcatel and Lucent on investigating stealthy worm attacks on networks.

Community-Based Learning Opportunities

- The Faculty offers a wide range of *co-operative work term placements* of four, eight, 12 and 16 months in duration, in private companies, government departments and research agencies.
- The Department of Electronics runs a *Fourth-Year Engineering Project*, in which student teams develop professional-level experience in a major engineering design projects.
- The Department of Mechanical and Aerospace Engineering also runs a *Fourth-Year Engineering Project*, where student teams have investigated a number of issues, including: geophysics surveying, gas turbines for wind generation, and patient simulators for hospitals, wireless technologies for the public sector, open source software for multimedia collaboration, in cooperation with Ottawa-based institutions.
- In the *Making a Scene* program in the School of Architecture and Urbanism, students collaborate with Algonquin College in the design and construction of sets for the National Arts Centre, the Bronson Theatre, the Algonquin College Theatre, and Carleton University's own theatre program.

- Through the *Student Design Clinic*, Architecture students provide free consultations to Ottawa homeowners on renovation projects.
- The School of Architecture and Urbanism offers students the opportunity of doing a directed studies course abroad, through a placement with the Peer-Urban Housing Project in Zambia.
- Students in Architecture and Industrial Design, working with counterparts at Clemson University in South Carolina, participated in a competition to design a full-scale mock-up of a universal *in-patient care room*, winning first place in the Health Care Environmental Awards Competition.
- Through its work with the *TAFETA project*, the School of Industrial Design enables students to participate in hands-on research projects in partnership with Elizabeth Bruyere and the SCO Health Service.
- The School of Industrial Design partners with the *National Capital Commission* to mobilize students to design structures to help facilitate the various festivals and events in the NCC while addressing aesthetic, technical and safety issues.
- Industrial Design students designed products for obstructive sleep apnea diagnosis and treatment, in partnership with the *Braebon Medical Corporation* in Kanata and Ogdensburg.
- The School of Information Technology offers a *Fourth-Year Project* to its students, the most recent of which involved developing a web-based application for innovators in the Carleton Foundry Program to share their knowledge.
- The School's Fourth-Year Network Technology Program prepares students to successfully write exams to obtain professional certification with *Cisco Networks*.
- Across the Faculty of Engineering and Design, a wide range of award-winning *student projects* address real-world issues in cooperation with locally-based institutions, including, for example, research on: water quality with Environment Canada and the Pickard Environmental Centre, transit operations with OC Transpo, pavement management with the Department of National Defence, electric vehicles with CFB Ottawa, transportation engineering with the City of Ottawa and federal agencies, road-temperature risks with the City of Ottawa, wireless medical devices with the Information Technology Association of Canada, soil fertility in Ghana via EWB, high-speed circuit performance with Nortel Networks, an interactive postal kiosk with Canada Post, a dietary device and an electronic garbage can for seniors in the TAFETA project, a multifunctional equipment dolly for paramedic teams with the City of Ottawa, tactical emergency equipment for paramedics assisting SWAT teams, with the City of Ottawa, a "smart meter" to track individual energy use with Hydro Ottawa, blood sugar monitor with the Canadian Diabetes Association, and a design for a module for a space hotel with the Canadian Space Agency.
- Carleton University's *Foundry Program*, which provides seed money to commercialize laboratory research and is supported by NSERC, is very active in funding student projects in the Faculty.

Community and Public Outreach

- One of Carleton's most successful outreach programs, *Virtual Ventures*, is a non-profit organization overseen by FED faculty and run by Carleton students for Ottawa-area students in grades 1 through 10. Now in its 15th year of operation, Virtual Ventures is a nationally recognized summer technology and science camp that also organizes clubs and undertakes school outreach.
- The Faculty of Engineering has been the lead unit for the offering of the *Shad Valley Program*, in which 52 top high-school students from across Canada with interests in engineering, science and business participate in a four-week residential program aimed at increasing self-confidence, and developing

problem-solving, communication and leadership skills. A national program operating each year at multiple sites across Canada, Shad now boasts an alumni network of 8,400 as well as more than 200 benefactors. Each year, four to six Carleton students are hired to support the program at Carleton.

- With representatives from Carleton, University of Ottawa, research and education institutions, the *Ottawa-Carleton Pathmakers Program* encourages young people, especially young women, to pursue a career in science, technology or engineering by making many presentations to elementary and secondary schools each year. The Faculty of Engineering and Design is represented on the program committee.
- Graduates of the Faculty established the *Carleton Engineering Alumni Projects Fund* to help students get the most out of their experience at Carleton, supporting travel and registration fees for competitions and other costs related to fourth-year programs and extracurricular projects.
- The School of Architecture and Urbanism sponsors the *Forum Lecture Series* that brings local, national and international architects to Carleton to interact with students, faculty and the general public on the profession and its impact on design and society.
- The School of Industrial Design organizes an *Annual Graduation Exhibition* of major student projects for the public and private sectors and the general public.
- The *National Capital Institute for Telecommunications* is an optical research network connecting university and research labs across the region, supporting research fellows and promoting major research alliances in photonics.
- The *Ottawa-Carleton Joint Institute for Environmental Engineering*, a partnership with the University of Ottawa, organizes seminars on relevant research for the broader engineering community in the Ottawa region.
- The *Ottawa-Carleton Institute for Electrical and Computer Engineering*, jointly run with the University of Ottawa, offers graduate programs and connects engineers in this specialization across the university, research, public and private sectors.
- The *Ottawa-Carleton Institute for Biomedical Engineering*, another unit shared with the University of Ottawa, links medical professionals from all sectors and specializations to areas of common interest, including medical instrumentation, biomedical image processing, medical informatics and telemedicine.
- Managed by the Faculty's Technology Management Program, the *Talent First Network* is a province-wide initiative enabling the transfer of open source technology to a wide range of users and to promote open-source knowledge development among students.
- The *Centre for Research on Integrated Infrastructure and Sensor Systems* promotes applications of sensor technology to biomedical and healthcare environments, including the Technology-Assisted Friendly Environment for the Third Age (TAFETA) Project.
- The *Environmental Technology and Training Institute*, an evolving initiative, is guided by a memorandum of understanding between Carleton and Environment Canada.

Student Organizations

- Affiliated with Engineers Without Borders and Women in Science and Engineering, the *Carleton Student Engineering Society* has raised funds for local organizations including, for example, the Children's Hospital of Eastern Ontario.
- The Carleton chapter of *Engineers Without Borders* organizes a variety of events for members, including, since 2005, interactive education sessions for more than 3,600 high school students in critical thinking about global poverty, water, sanitation, food scarcity and energy.

- The Carleton chapter of *Women in Science and Engineering (WISE)* hosts events for members on such topics as work-life balance, self-defence and professional topics.
- A Carleton Engineering student founded *Go Eng Girl!*, which encourages teenage girls to pursue technology careers, mentors girls at a home for pregnant teens, and has reached out to thousands of elementary and high-school students.
- To bring students, faculty and industry together, the *Carleton Mechanical and Aerospace Society* organizes events such as career night and sponsors members to attend conferences.
- The *Engineering in Medicine and Biology Society Club* provides networking among graduate students, faculty and industry, and carries out outreach to schools.

Opportunities Going Forward

- Preparation of a full and detailed *inventory* for the Faculty of community engagement by faculty members, through teaching, research and volunteering.
- Among interested departments, schools and institutes, promotion of a *cross-unit exchange* of methods and experiences in the delivery of practicums, field-based courses, team projects and other forms of experiential learning.
- In conjunction with Student Support Services and with other Faculties, strengthening *cross-unit coordination* of course and research engagement with external organizations in all sectors.
- Development and maintenance of more over-arching, longer-term *partnerships* with local institutions such as federal-government agencies and research bodies, business corporations and non-profit organizations, particularly those in the health-care and environmental fields.
- Replication and expansion of successful partnerships such as TAFETA, the Patient Simulator, heritage conservation and other initiatives.
- Expansion of the Faculty's engagement with *non-profit organizations* active in other fields, such as social services, disability issues, education and human rights.
- Dissemination of methods and lessons learned in designing, scaling up and sustaining *major special programs* such as Virtual Ventures and Shad Valley.
- Provision of information and inspiration to other Faculties in terms of the active role of *FED student organizations* in community and public outreach and co-curricular service projects.

Best Practices

- **Faculty Contributions:** Faculty community engagement through teaching, research and volunteering that strengthens Carleton's relationship with federal departments, research institutions and private corporations working on wireless networks, sensor applications, open-source innovation and industrial design in the fields of defence and security, biomedical services, seniors care and heritage conservation.
- **Community-Based Learning:** Major co-op placement program running alongside an array of fourth-year team projects in several Engineering departments and Information Technology, and the Making a Scene and Student Design Clinics in Architecture and Design.
- **Community and Public Outreach:** Two highly successful and long-running special programs—Virtual Ventures and Shad Valley—connect the Faculty even more deeply to the Ottawa region, while students are being supported by a special Alumni Projects Fund and many opportunities to network with specialists in their fields from the public and private sectors.
- **Student Organizations:** Activist student leaders and dedicated faculty members have collaborated to help two best-practice student organizations succeed: the Carleton chapters of both Engineers Without Borders and Women in Science and Engineering.

Annex A FED Faculty Involved in Community-Relevant Research Outside the Ottawa Region

Canada-Wide

- *Prof. Paul Van Geel* (Civil and Environmental) carries out research on groundwater flow, septic tanks and uranium mining.
- *Prof. George Hadjisophocleous* (Civil and Environmental) is an NSERC Industrial Research Chair in fire- safety engineering.
- In 2005, the 20-student team of *Prof. Burkan Isgor* (Civil and Environmental) won the Great National Concrete Toboggan Race.
- *Prof. David Lau* (Civil and Environmental) has developed a system to retrofit bridges with sensors that transmit data to engineers in real time.
- Nortel/NSERC Chair, *Prof. Qi-jun Zhang* (Electronics), was elected to the board of directors of the Institute of Electrical and Electronics Engineers.
- *Prof. Edgar Matilda* (Mechanical and Aerospace) carries out research on the effectiveness of drug delivery through the mouth and the nose, with support from the Ontario Research Fund.
- *Prof. James Green* (Computer and Systems) is funded by the Canada Foundation for Innovation to use mass spectrometry peptide identification strategies to determine whether a person has a disease.
- A specialist in urban design in the United States and Europe, former School Director *Prof. Ben Gianni* (Architecture and Urbanism) has worked with first-year graduate studio students on strategies for transforming Toronto's Regent Park.
- *Prof. Bjarki Hallgrimsson* (Industrial Design) works on assisted ambulatory devices, including the "rollator" walker, and has presented research on these innovations across Ontario and elsewhere.
- *Prof. Ali Arya* (Information Technology) receives SSHRC funding to develop digital interactive media to both present and preserve Aboriginal dance.

International

Prof. Alex Ellery (Mechanical and Aerospace) works with the European Space Agency on problems related to space-based robotics.

The Faculty of Public Affairs

Dean: Katherine Graham

Numbers
Undergraduate Students 5,386
Graduate Students 1,131
Faculty 179
Staff 46

Programs
Bachelor of Arts
Bachelor of Arts (Honours)
Bachelor of Public Affairs and Management
Graduate Diploma in Public Policy
Graduate Certificate in Conflict Resolution
Master's Programs 11
PhD Programs 5

Faculty Contributions to the Community

- A nationally recognized expert in urban affairs, *Faculty Dean Katherine Graham* serves as a member of the Mayor of Ottawa's task force on governance, and collaborates closely with the Deputy City Manager responsible for the No Community Left Behind Program, and directs the University's Batawa Project.
- *Associate Dean Chris Dornan,* Director of the Kroeger College of Public Affairs, teaches the workshop that produces the School of Journalism and Communication's web newsmagazine, *Capital News Online,* which reports extensively on federal policy issue and Ottawa-based federal agencies.
- *Associate Dean Edward Jackson* has chaired the University's Initiative for Community-University Engagement, and carries out joint research projects with local non-profit and economic organizations on financing and evaluation.
- *Associate Dean Michael Mac Nell* serves on a variety of university committees working on student engagement and success, including the promotion of co-curricular activities involving community placements for undergraduates and graduate.
- *Prof. Rose Cunningham* (Economics) uses a community service learning approach to teaching the first-year Economics course on social issues, placing students in non-profit, government and private sector agencies in the Ottawa area.
- *Prof. Charles (Chuck) Freedman* (Economics) Co-Director of the Centre for Monetary and Financial Economics, advises and carries out research for the Bank of Canada, as well as the International Monetary Fund.
- *Prof. Stephen Ferris* (Economics) works closely with the Bank of Canada, Department of Finance and DFAIT in organizing joint seminars, and in his capacity as Co-Director of the Department's Centre for Monetary and Financial Economics.
- *Prof. Hashmat Khan* (Economics) undertakes research for the Bank of Canada on macroeconomic policy related to inflation, exchange-rate dynamics and pricing.
- *Prof. Nick Rowe* (Economics) is a frequent commentator in the Ottawa and national media on macroeconomic policy, inflation and the Bank of Canada, and has advised the Bank on inflation-targeting measures.
- *Prof Marcel Voia* (Economics) collaborates with Statistics Canada on a number of research projects on labour markets, firm growth and business cycles.
- *Prof. Joan DeBardeleben* (EURUS) engages European diplomats and DFAIT representatives in the workshops and projects of the Centre for European Studies, which she directs.
- *Prof. Piotr Dutkiewicz* (EURUS) regularly advises the Russian Embassy and other Eastern European diplomatic missions on International relations issues, and has worked on public administration and on community-based juvenile justice strategies, in Russia.
- *Prof. Marcus Pistor* (EURUS) serves as advisor to the Canada-Europe Parliamentary Association.

- *Prof. James Casteel* (EURUS) taught a course in German-Jewish history for Carleton's Learning in Retirement program.
- *Prof. David Carment and Prof. Yigadeesen Samy* (both in International Affairs) work with officials at CIDA, IDRC and DFAIT on policy research on failed and fragile states.
- *Prof. Trevor Findlay* (International Affairs) works closely with the Department of Foreign Affairs and international Trade on treaty compliance related to nuclear and other weapons.
- A frequent media commentator on foreign policy, *Prof. Fen Hampson* (International Affairs), co-directs the Canada-US Project, advised the Independent Panel on Canada's Future Role in Afghanistan and oversees NPSIA's active training programs for diplomats based in Ottawa.
- *Prof. Josh Greenberg* (Journalism and Communication) serves as Academic Director of the Centre for Voluntary Sector Research and Development, uses service-learning methods in his teaching, and writes a blog for non-profit leaders and advocates.
- Broadcast journalist *Prof. Susan Harada* (Journalism and Communication) serves as Apprenticeship Coordinator in the School of Journalism and Communication, placing third- and fourth-year students, and Master's students, with local employers on an unpaid basis.
- *Prof. Kanina Holmes* (Journalism and Communication) teaches citizen journalism and has conducted training in media literacy for Ottawa's voluntary sector, including a workshop sponsored by the Alliance to End Homelessness.
- *Prof. Klaus Pohle* (Journalism and Communication) is publisher of the award-winning *Centretown News*, the region's largest community newspaper with 17,000 copies delivered 12 times a year, produced by third- and fourth-year Carleton Journalism students.
- Director of the Centre for Conflict Education and Research, *Prof. Cheryl Picard* (Law) teaches mediation methods to graduate students and local professionals, serves as mediator for the Police Services Board, and works on conflict education in Cuba with CIDA.
- *Prof. Logan Atkinson* (Law), Corporate Secretary of the University, is the volunteer President of the Eastern Ontario Curling Association.
- *Prof. Rianne Mahon*, Director of the Institute of Political Economy, is Co-Chair of the 2011 Women's Worlds Congress, working jointly with the University of Ottawa and the Université du Québec a Gatineau, and national and international women's networks, with the support of Canada's Office of the Status of Women.
- *Prof. Peter Andrée* (Political Science) The leader of an initiative on community service learning with the Educational Development Centre, employs experiential learning methods in his teaching of courses on the politics of food and the environment, researches community-based engagement strategies, and is himself an organic farmer in Prince Edward County.
- A specialist in North American politics, *Prof. Melissa Haussman* (Political Science) promotes experiential learning of her students through participation in political processes (notably the 2008 American Democratic Primaries) and internships at the Washington Center.
- *Prof. Annette Isaac* (Political Science) studies factors of success in the experience of Black women Members of Parliament.
- *Prof. Jonathan Malloy* (Political Science), an expert in parliamentary politics, is a frequent contributor to the opinion pages of the *Ottawa Citizen*.
- *Prof. James Meadowcroft* (Canada Research Chair in Governance for Sustainable Development) works closely with policymakers and associations in Ottawa on sustainable development and sustainable energy issues.
- Director of the School of Public Policy and Administration, *Prof. Susan Phillips* teaches

and writes on government-voluntary sector relations, organizes "critical conversations" with policymakers on science and regulation, and is a key player in the Centre for Voluntary Sector Research and Development.
- *Prof. Rob Shepherd* (Public Policy and Administration) frequently serves as a consultant to several federal agencies, including the Treasury Board, on program management and evaluation.
- Co-Director of the COOL-RDC research centre, a joint venture with Statistics Canada and the University of Ottawa, *Prof. Jennifer Stewart* (Public Policy and Administration) studies the impact of community-based programs on child health outcomes.
- Among other research interests, *Prof. Christopher Stoney* (Public Policy and Administration) directs the Centre for Urban Research and Education and studies community engagement in urban neighbourhood planning in the City of Ottawa.
- *Prof. Glen Toner* (Public Policy and Administration) is active as an advisor on environmental policy to public-sector and business leaders and organizations in the Capital Region.
- A specialist in immigrant settlement and seniors' issues, *Prof. Behnam Behnia* (Social Work) is Academic Director of the research centre Research Resource Division on Refugees, a research centre.
- An active researcher and advocate of anti-racist policies and networks, *Prof. Rashmi Luther* (Social Work) has played a key role in local social-service, multicultural and immigrant-serving agencies in the Ottawa region.
- *Prof. Karen Schwartz* (Social Work) co-teaches a course on research for and with community-based organizations, studies policies and systems in support of community-based research, and is a member of the Community-Based Research Network of Ottawa.
- *Prof. Adje Van de Sande* (Social Work) is an advocate on child poverty issues in the greater Ottawa region and is also active with the Canadian Association of Schools of Social Work.
- *Emerita Prof. Bessa Whitmore* (Social Work) works closely with the Community-Based Research Network of Ottawa and publishes on community-university partnerships.

Community-Based Learning Opportunities

- Most FPA units offer paid *co-op placements* for their students, including for undergraduates (eg. Kroeger College, Law), graduate students (NPSIA, SPPA) or both (Political Science, EURUS).
- The School of Journalism and Communication runs an *Apprenticeship Program* that places third- and fourth-year students with media organizations nationwide, some of which are based in Ottawa.
- Through the Rwanda Initiative, the School also offers Journalism and Communication, and Kroeger College, students the opportunity to work as interns with media organizations in Rwanda.
- Journalism and Communication also engages students, as part of their program of studies, in producing a wide range of media products with an Ottawa focus, particularly *Centretown News*, a community newspaper, and *Capital News Online*.
- The Economics Department operates an *internship program* that places MA students in public, private and non-profit organizations.
- The Department of Political Science offers the *Carleton-Leeds Parliamentary Exchange Program*, which organizes internships for honours students with Members of Parliament In Canada and the United Kingdom. The Department also offers internships in Washington, DC, through the Washington Center.
- NPSIA manages a well-established *internship program* with government departments and agencies, NGOs and private sector associations.
- EURUS runs an internship program to enable graduate and undergraduate students to develop their workplace and policy skills.

- The Institute of Criminology and Criminal Justice employs a full-time coordinator to support 80 undergraduates each year in *field placements* with Ottawa-based organizations at the local, provincial or federal levels involved in policing, justice, corrections and related services.
- Students are supported to carry out community-based projects in a range of courses in Journalism and Communication, including Advanced Study of the Mass Media and the Communication and Community Course.
- Economics offers a first-year seminar on *The Economics of Social Issues*, which places students in Ottawa-based non-profits, businesses or government agencies to carry out a community-service project over two terms.
- The Department of Law offers, on an executive workshop basis, a *Graduate Certificate in Conflict Resolution*, which attracts a wide range of working professionals from the community.
- The Department of Political Science runs a course for undergraduates on *environmental politics*, which requires students to undertake a community-based research project on sustainable food with local non-profits.
- In conjunction with the Centre for Voluntary Sector Research and Development, the School of Public Policy and Administration offers executive-style delivery of a graduate coursed on *voluntary sector governance and management*, which is attended by a wide range of local practitioners as well as full-time students.
- Also in collaboration with CVSRD, SPPA offers a graduate course in *public policy and civil society* in which student teams carry out projects with local non-profits and charities. Another course on public affairs and lobbying also requires student teams to conduct research for and with non-profits.
- The School of Social Work manages an extensive portfolio of *field placements*, or practica, for both undergraduate and graduate students. Fourth-year students must undertake a one-term practicum of 364 hours while MSW students must complete at least 500 hours; placements are arranged with Ottawa-based non-profit and government agencies.
- Social Work also runs a *graduate course on research and evaluation methods* which involve community-based projects by students in teams or as individuals.

Community and Public Outreach

- The Dean's Office has been active in supporting three national initiatives that advance community-university engagement nationwide: Community-Based Research Canada, a pan-Canadian network co-founded by Carleton; the Canadian Alliance for Community-Service Learning, currently hosted at Carleton; and the Causeway Initiative on Social Finance, also co-founded by Carleton, with foundations and non-profits.
- In Ottawa, the Dean's Office has supported the Community-Based Research Network of Ottawa (CBRNO), hosted at the Social Planning Council, to examine how it could deepen and expand its role as interlocutor and broker between the University and community organizations. Started by members of the School of Social Work and their partners in the community, the Network has begun to talk with the Deans of Science, Arts and Social Sciences and Public Affairs about ways and means of playing this facilitative role.
- Most academic units in the Faculty engage part-time *contract instructors* from a wide range of government agencies in Ottawa, including for example, the Bank of Canada (Economics), Statistics Canada (Economics) and the Ottawa Police Service (Law), thus promoting the two-way flow of knowledge and projects between the university and public-sector institutions.
- The annual *Kroeger College awards dinner* draws accomplished Ottawa-based leaders (as well as leaders from across the country) from

government, business and the non-profit sector.

- Through its *Distinguished Visitors program*, Kroeger College engages prominent figures in public affairs to engage with College students.
- The *Rwanda Initiative* has sent more than 70 Canadians to Rwanda, including a large number of professional journalists, to conduct training and give advice.
- In 2008, the School of Journalism and Communication ran a workshop on its programs for 13 *Ottawa Valley high school* students from varied ethnic backgrounds, encouraging them to consider becoming journalists.
- Over 150 students from across Canada (as well as the US and Russia) participated in last year's *Model NATO Symposium*, organized by the Department of Political Science and actively involving the Ottawa-based embassies of NATO member-countries.
- NPSIA runs a wide range of *professional training programs* for Ottawa-based diplomats and professionals, including courses on international negotiation, international social protocol, and diplomacy and foreign-service skills.
- SPPA works with its Alumni Association and Carleton's Development Office to organize *networking events* for students and alumni, featuring talks by prominent graduates of the program.
- Through its delivery of the *Certificate in Nunavut Public Service Studies* on-site in three centres in Nunavut, SPPA consults extensively with Inuit organizations in Ottawa on recruitment and curriculum matters.
- The School of Social Work runs a variety of *professional development workshops* for groups and individuals in Ottawa.
- The same School also delivers its BSW program in *First Nations communities* in Moose Factory and Fort Frances, northern Ontario.
- Social Work has formed a *partnership with Ottawa hospitals* to develop common research and educational initiatives for social workers working in hospital settings. In 2007, five hospital social workers were granted three-year adjunct professorships.
- The Research Resource Division on Refugees, a SSW research centre, is engaged with research and knowledge dissemination on *newcomers and settlement issues* and refugee policy. It is working with Ottawa and St. Paul universities to set up the Ottawa Migration and Refugee Research Network. RRDR publishes *Integration Net*, a national newsletter, for Citizenship and Immigration Canada.
- The *Carleton University Survey Centre*, affiliated with the School of Journalism and Communication and the Department of Political Science, has undertaken contract research on public transportation and on environmental practices by citizens for the City of Ottawa, and on public perceptions on smoking and anti-smoking measures for Health Canada and for the Leeds and Grenville Health Unit.
- The Centre for European Studies (CES) employed EURUS students to conduct two *workshops on the European Union* for 79 high school students. A mini-course for high school students has been prepared, as well.
- The *Knowledge Cluster* project of CES engages Ottawa-based policy-makers and researchers in government, business and the NGO sector on policy issues affecting Canada and Europe, including energy, governance and the environment.
- The *Canadian Centre for Intelligence and Security Studies*, based in NPSIA, carries out research on energy infrastructure, terrorism and other subjects for a variety of federal agencies involved in natural resources, security, intelligence and law enforcement.
- The *Centre for Security and Defence Studies*, also affiliated with NPSIA, organizes strategic analysis seminars on security policy for mid- and senior-level government officials, and carries out outreach activities with Parliament, government agencies, school boards and the media.

- NPSIA's *Centre for Trade Policy and Law* has undertaken a major project on Canada-US policy engagement under the incoming Administration, holding a conference in late 2008 attended by senior public-sector and association representatives as well as government officials and diplomats. The Centre also offers certificate programs in trade policy and commercial diplomacy for private-sector professionals, federal-government employees and foreign-embassy personnel.
- Located in the Department of Law, the *Centre for Conflict Education and Resolution* offers a wide range of professional workshops and consultation services in the Ottawa region. The Centre also provides mediation services to the Ottawa Police Service Voluntary Conflict Resolution Program.
- The *Centre for Policy and Program Assessment*, in SPPA, has carried out contract research and evaluation for a wide range of federal-government, Aboriginal and other agencies.
- The Faculty of Public Affairs sponsors, in cooperation with the World Bank, the International Program for *Development Evaluation Training*, an executive certificate program with links to SPPA's *Graduate Diploma in Public Administration* specializing in program evaluation. IPDET has developed active links with the professional evaluation community in Ottawa, including members of the Ottawa chapter of the Canadian Evaluation Society.
- SPPA's *Centre for Governance and Public Management* works closely with the Canadian International Development Agency on several public-administration capacity-building projects in Russia, Georgia and elsewhere.
- The Centre for Voluntary Sector Research and Development, another research unit of Public Policy and Administration, manages a wide range of national and local projects on non-profit policy, governance and administration. In the Ottawa region, the Centre provides ongoing support to the Ottawa Chamber of Voluntary Organizations, a network of smaller non-profits and charities, and works closely on many initiatives with the City of Ottawa, the Community Foundation of Ottawa and the Public Health Agency of Canada, among others. Through its national project, The Charities File, the Centre has engaged local charities in strengthening their ability to meet the reporting requirements of the Canada Revenue Agency.
- Also affiliated with SPPA, the *Centre for Urban Research and Education* has worked with CVSRD to assist and evaluate the City of Ottawa's Neighbourhood Planning Initiative in Hintonburg, Mechanicsville and West Wellington. CURE's Director and CVSRD's Managing Director also sit on the Knowledge Transfer Table of the City's No Community Left Behind initiative.
- Focusing on policy research related to social finance and responsible investing, the *Carleton Centre for Community Innovation* works with the Public Service Alliance of Canada staff pension fund, Alterna Credit Union and the Ottawa Community Loan Fund to promote new financing strategies for affordable housing in the region. The Centre, linked with SPPA, recently worked with the University of Guelph to support student interns at Community Futures Development Corporations in Eastern Ontario.
- The *Centre for Social Welfare Studies* in the School of Social Work has undertaken a research project on diversity and social exclusion for Canadian Heritage.
- A new *Centre for Monetary and Financial Economics* in the Department of Economics, to is developing joint seminars and research projects with the Bank of Canada, Department of Finance, Statistics Canada and DFAIT.

Student Organizations

- Students in the development stream of Kroeger College made a graduating gift in the form of a *donation to Kiva.org,* to support financing for micro-entrepreneurs in Africa and Asia.

- The Carleton University Criminology and Criminal Justice Society provides information to link Carleton students wishing to *volunteer* with community organizations in Ottawa.
- The Carleton chapter of *Journalists for Human Rights* actively engages Carleton students in human-rights reporting.
- Carleton Social Work students are represented in the *Ontario Association* of *Social Workers.*
- The SIGNALS group of students in the Innovation, Science and Environment concentration in SPPA organizes networking events involving speakers and alumni from the public, private and non-profit sectors.
- The NPSIA Benefit Soirée is an annual, student-run graduation event which raises funds in support of a local or international community organization.
- In 2007, students from Political Science and Law formed *Black Affinity,* a campus club that promotes black interests on campus, employment opportunities for Black students and awareness of Africa's development challenges. In 2008, Black Affinity organized *Rise and Flow,* a summer camp that builds confidence and skills in sports and music among low-income children from the Ottawa community. External funds are being sought for an expanded camp in 2009.

Opportunities Going Forward

- Preparation of a full and detailed *inventory* for the Faculty of community engagement by faculty members, through teaching, research and volunteering.
- Encouragement of faculty working on community-oriented initiatives nationally and internationally to *increase their activities in the Ottawa region.*
- Among interested departments, schools and institutes, promotion of *cross-unit exchange* of methods and experiences in the delivery of field-based courses and other forms of experiential learning.
- In conjunction with Student Support Services and with other Faculties, strengthening of cross-*unit coordination* of course and research engagement with external organizations in all sectors.
- Increasing of capacity in the Faculty in *community-service learning strategies and methods* in the program delivery cycle, from recruitment through planning to implementation and evaluation.
- Continuation and deepening of the *multi-channel engagement with non-profits and charities* in particular in the Ottawa region.
- Improved coordination of teaching and research activities through long-term partnerships with major *federal departments and agencies* (eg. Bank of Canada) and municipal organizations (City of Ottawa, Ottawa Police Service).
- Accelerated conversion of the content of community-engaged research and professional training into *curriculum for degree courses*.
- Achievement of better coordination of teaching and research engagement with *communities in Eastern Ontario.*
- *Encouragement of student organizations* to promote co-curricular service projects that provide assistance to non-profit organizations in the community, including those serving immigrant and refugee populations.

Best Practices

- ***Faculty Contributions***: Faculty community engagement through teaching, research and volunteering that strengthens Carleton's relationship with non-profit and government agencies in the Ottawa region working on poverty, food, justice, social, economic, environmental and international issues.
- ***Community-Based Learning:*** Major field-placement and internship programs for upper-year undergraduates and graduate students, plus a growing number of service-learning and action-research courses, production of community media, and program delivery in First Nations communities.
- ***Community and Public Outreach:*** An array of research centres working with community partners through joint research initiatives and professional training in non-profit management, social finance, evaluations, conflict mediation, refugee issues, defence and security, and weapons in space; networking events among alumni, faculty and students; a nationally recognized awards dinner (Kroeger College)
- ***Student Organizations:*** Student - run fundraising for local and international organizations, and a summer camp for low-income children.

Annex A
FPA Faculty Involved in Community-Relevant Research Outside the Ottawa Region

Northern Canada

- *Prof. Frances Abele* (Public Policy and Administration) leads SSHRC-funded research on the social economy and community sustainability in Canada's north, and teaches in the Certificate Program in Public Service Studies in Nunavut.
- *Prof. Stephan Schott* (Public Policy and Administration) teaches in the Nunavut Certificate Program and conducts research on conflicts over the management of common natural resources by multiple stakeholders, particularly in the fishing sector.

Canada-Wide

- *Prof. Frances Woolley* (Economics) publishes on the economics of household income, savings and taxation.
- *Prof. Christopher Worswick* (Economics) collaborates with the Metropolis Project to carry out research on the earnings and other economic and social performance of immigrant workers in Canadian cities.
- Working closely with Statistics Canada, *Prof. Lanling Wang* (International Affairs) is a member of the board of directors of the Canadian Women Economists Network.
- *Prof. Peter Johansen* (Journalism and Communication) has chaired the *United Church Observer* magazine and worked as an award-winning travel writer for the *Ottawa Citizen* and other major papers.
- Director of the School of Journalism and Communication, *Prof. Karim Karim* has studied, for Citizenship and Immigration Canada, the different roles of the mainstream and ethnic media in enabling the settlement process of immigrants.
- *Prof. Kirsten Kozlanka* (Journalism and Communication) is developing an online archive of alternative media linked to Canadian social movements and civil society.
- CTV Chair in Science Broadcast Journalism, *Prof. Kathryn O'Hara* (Journalism and Communication) convened a workshop of experts on media and policy for the National Cancer Institute's prevention research initiative.
- *Prof. Catherine McKercher* (Journalism and Communication) has served as a judge for several national journalism award competitions.
- *A* specialist in online journalism, *Prof. Mary McGuire* (Journalism and Communication) is organizing a series of talks by professional journalists on changing newsrooms and new skills and tools.
- *Prof. Doris Buss* (Law), an expert on human and gender rights, is an active member of the board of directors of the Women's Legal Education and Action Fund.
- *Prof. Dawn Moore* (Law) is working on a SSHRC-funded research project on the experiences of women in Drug Treatment Courts across Canada.

- Currently Director of the School of Social Work, *Prof. Diana Majury* (Law) is a founding member of the Women's Court of Canada and *Health Sharing*, Canada's first women's health magazine.
- *Prof. Rosemary Waskett*, Chair of the Department of Law, has researched non-union couriers in Winnipeg and maternal and parental benefits for "precarious" workers.
- *Prof. Jane Dickenson-Gilmore* (Law) has served as a Commissioner on the federal Indian Land Claims Commission.
- Former Director of the Institute of Criminology and Criminal Justice, *Prof. Joanna Pozzulo* (Criminology/Psychology) studies the cognitive processes of children who are eyewitnesses to crime.
- *Prof. Jon Pammett*, (Political Science) Co-Director of the Carleton University Survey Centre, studies voting patterns in Canadian elections, including youth voting, as well as comparative analysis of European democratic participation.
- A specialist in social policy and impact evaluation, *Prof. Saul Schwartz* (Public Policy and Administration) has carried out pan-Canadian research on social assistance reform and on personal bankruptcy.
- *Prof. Gene Swimmer* (Public Policy and Administration) serves on the board of the Ontario Municipal Employee Retirement System.
- *Prof. Hugh Armstrong* (Social Work) leads research on violence against personal support workers in Ontario, Manitoba and Nova Scotia.
- *Prof. Sarah Todd* (Social Work) carries out research on the impact of social work policy on community workers.
- *Prof. Allan Moscovitch* (Social Work) has led national research for the Social Research Development Corporation on home ownership for low-income households, and has served as a volunteer on boards of national and local Jewish non-profits as well as of the Ottawa United Way and Social Planning Council.
- *Prof. Roy Hanes* (Social Work) is a leading researcher and analyst of disability policy in Canada.
- *Dr. Tessa Hebb*, Managing Director of the Carleton Centre for Community Innovation, coordinates a Canada-wide, SSHRC-funded research project on responsible investing and social finance in collaboration with community loan funds, pension funds, governments and social investors.

International

- *Prof. Ingela Alger* (Economics) investigates household-level family ties, insurance systems and their implications for economic development.
- *Prof. Jean Daudelin* (International Affairs) studies the politics of conflicts over land and property rights in communities in Brazil and Central America.
- *Prof. Valerie Percival* (International Affairs) undertakes research on post-conflict reconstruction of health systems at multiple levels, including that of the local community.
- *Prof. Cristina Rojas* (International Affairs) critically examines the roles of philanthropy, business and civil society in Colombia and elsewhere in Latin America.
- *Prof. James Ron* (International Affairs) studies human rights, civil society and conflict, and advises CIDA, DFAIT, the Red Cross and Human Rights Watch.
- *Prof. Allan Thompson* (Journalism and Communication) has led the award-winning Rwanda Initiative, which trains Rwandan journalists and engages Canadian journalists and students, with a strong focus on the social sustainability of Rwandan communities in the post-genocide period.
- *Prof. Chris Brown* (Political Science), an expert in decentralization policy in Africa, has managed a major CIDA-funded capacity-building project in 34 districts in northern Ghana.
- *Prof. Laura Macdonald*, Chair of the Department of Political Science, has studied the role of non-governmental organizations

and social movements in Central America in relation to aid, trade and human rights.

- A member of an international network of researchers and policy-makers on protracted refugee situations, *Prof. James Milner* (Political Science) carries out research for multilateral organizations on refugee movements, camps and related policies in Africa and Asia, and is involved in Ottawa with the Research Resource Division on Refugees.
- *Prof. Lisa Mills* (Public Policy and Administration) has carried out community-based research on gender, maternal health and local health centres in rural Mexico.
- *Prof. Colleen Lundy* (Social Work), who chairs the management board of the Research Resource Division on Refugees, has carried out research on the role of women in transition economies in Cuba and Russia.

Faculty of Science

Dean: George Iwama

Numbers
Undergraduate Students: 1,836
Graduate Students: 417
Faculty Members: 130
Staff: 61

Programs
Bachelor of Science Programs 3
Master of Science 7
Master of Computer Science
PhD Programs 7

Departments and Institutes
Department of Biology
Department of Chemistry
Department of Earth Sciences
Department of Physics
School of Mathematics and Statistics
School of Computer Science
Institute of Biochemistry
Institute of Environmental Science
Integrated Science Institute
Technology, Science and the Environment

Major Laboratory Partnerships
SNOLab (Neutrino Research), CERN Laboratory (ATLAS Research on the Structure of Matter) Environment Canada, National Wildlife Research Centre

Co-op Placement Partners
Health Canada, Environment Canada, Agriculture and Agri-Food Canada, Biomax Life Sciences, Canada Border Services Agency, Department of Fisheries and Oceans, Corel and others

Faculty Contributions to the Community

- A strong promoter of the Faculty's Science Cafés in The Glebe, *Dean George Iwama* works on the stress response of fishes and advises animal welfare groups around the world on fish welfare, influencing such research initiatives as the Sixth Framework Programme of the European Union.
- *Prof. Mark Forbes*, CRC and Associate Dean, manages research in the far north on determinants of the reproductive success of Arctic breeding birds. One of his students taught research methods developed at the Forbes Lab at Arctic College in Iqaluit.
- *Professor Michel Barbeau* (Computer Science) co-organizes the Carleton-MITACS Security Day; MITACS fosters links among private, public and non-profit organizations on mathematical technologies that help address security issues.
- Students of *Prof. Naomi Cappucino* carry out botanical inventories and studies of invasive plan species in locally important habitats, and some have examined impacts on Aboriginal communities; she is the Faculty Advisor for mini-enrichment course for high school students on The Natural History of Ottawa.
- *Prof. James Cheetam*, Biology Chair, consults to Pharmacia Sensors and has advised Rockefeller University on science outreach; among his personal interests, he is a member of the Sons of Scotland Pipeband.
- Studying the mechanisms underlying conservation, *Prof. Steve Cooke's* lab uses underwater videography to monitor free-swimming fish in the wild; he advises the mini-enrichment course for students on The Wonderful World of Fish, working around local waters.
- *Prof. Root Gorelick (*Mathematics and Biology) is testing whether there is significantly greater biodiversity with community-based versus centralized water-supply policy.
- *Prof. Evangelis Kranakis* leads Complex Adaptive Networks for Computing and Communication (CANCOM), a joint business-university research initiative based in Ottawa.
- *Prof. Mark Lanthier* (Computer Science) is a member of the Paradium Group, a partnership between Carleton and Almerco, a Canadian environmental technology company working on neighbourhood spatial modeling and forest fire/earthquake simulators.

- *Prof. Michael Runtz,* one of Canada's most highly respected naturalists, teaches a televised course on natural history that draws 2,000 students every year and is the most popular course of its type in Canada.
- A full-time employee at the Museum of Nature, part-time *Prof. Natalia Rybczynski* conducts research on fossils in the Arctic and also enables her students to teach March-break workshops for children at the Museum.
- *Prof. Tom Sherrat* (Biology) has talked about mimicry among insects and animals on CBC Radio's Quirks and Quarks science show.
- A frequent media commentator on science policy, *Prof. Peter Watson* has given a range of talks on astronomy and cosmology to adult clubs and high school students in the Ottawa area, and co-produced a television series on "The Basis of Matter."
- *Prof. Donald Wiles* has taught Radiochemistry at AECL's Chalk River Nuclear Laboratories, and co-founded the Almonte public lecture series.
- *Prof*. *Janet Yack* appeared on the Quirks and Quarks episode on caterpillar communication.

Community-Based Learning Opportunities

- Through the *Science Co-op Education Program,* over 30 academic programs offer valuable work experience in paid co-operative placements with private and public organizations. All honours degrees offer 12-20 months of co-operative education and work-study opportunities with local and province-wide businesses.
- First-year students can compete for a summer internship in Earth Sciences and take the required *Geology Field Course*, which involves a ten-day field trip in the Kingston region.
- Building on links with the Canadian Museum of Nature, a Fourth-Year Field Course is offered in *Vertebrate Paleontology and Paleoecology* at remote sites (eg. the Burgess Shale, BC).
- Students in Medical Physics can participate under faculty supervision in research projects run by the *Medical Physics Institute,* a broad Ottawa-based partnership.
- *The School of Mathematics and Statistics Graduate Co-operative Program* supports targeted student placements in government, research and business organizations in the region.
- Students from other universities come to Carleton's *Isotope Geochemistry and Geochronology Research Facility* to study environmental poisoning of animals (eg. northern moose).
- Science students have participated in Carleton's *Alternative Spring Break*; one year this involved a Biology student working at the Cuernavaca Centre in Mexico building houses for Habitat for Humanity and learning about global justice.

Community and Public Outreach

- With the Dean's active support, the Faculty has initiated the *Science Café series* at the Wild Oat bakery in The Glebe, to share experience and knowledge with the community about science. Topics presented by faculty members have included eating farmed fish, urban wildlife, active volcanoes and more.
- An active outreach program is run by *Earth Sciences*, liaising with high school science teachers and students at all levels (eg. School of Rock geology course and summer workshops for teachers).
- *Undergraduate Research Day:* Guests are invited to learn about the thesis projects of undergraduates in Sciences; awards are given to high-performing students.
- *Water Day:* This is dialogue on water-related research moderated by the Dean and including speakers from Biology, Chemistry and Earth Sciences.
- *CU Game Day:* Professionals from the gaming industry work with students on campus for one day each year on game-development and bug-removal strategies for Microsoft products like Xbox 360 and Windows Vista.

- *Bridging to University* is a program where all departments in the Faculty offer summer internships for nine high school graduates entering Sciences in the fall.
- *Butterfly Exhibition:* Aimed at the general public, the Biology Department hosts a live show of hundreds of exotic tropical butterflies at the Nesbitt Building Greenhouses.
- *Public lectures* are organized by the Faculty, including the Herzberg Lecture on science and society and the Discovery lecture on science journalism, sponsored jointly with the School of Journalism and Communication.
- The Faculty co-sponsors *Enrichment Mini-Courses for high school students* at all levels, in cooperation with the University of Ottawa and La Cité Collegiale, with Carleton hosting about 1,000 students.
- *The Chemistry Magic Show* is organized regularly by the Department of Chemistry as a window on the world of science for the general public and the Carleton community.

Student Organizations

- *Carleton University Students for the Environment* enlists members to protect and restore wilderness and practice responsible use of ecosystems, take part in community projects and cooperate with other environmental groups.
- The *Carleton University Math Society* runs workshops and colloquia for students and faculty to highlight interesting issues in mathematics.
- The *Carleton University Geology Society* organizes events for Earth Sciences students.

Opportunities Going Forward

- In courses and labs, increased field-based faculty and student research in Ottawa on *brownfields development, water quality and quantity, air quality, and medical applications of science and technology.*
- Attraction of more *knowledge mobilization and dissemination funding* from NSERC and CIHR for projects that engage community partners.
- Provision of content for, and maintenance of, a *web link for high school teachers and guidance counselors,* as part of its overall recruitment strategy, to help teachers teach science and generate interest among youth.
- Support for *student organizations* to engage in community-based activities and contributions.
- The embedding in *new, cross-Faculty programs*-for example, science regulation, -of a strong community engagement dimension.

Best Practices

- ***Faculty Contributions:*** Effective use of mass media (radio and television) to engage the public in learning about science.
- ***Community-Based Learning Opportunities:*** A robust, Faculty-wide co-operative placement program with work-study opportunities; Student Success Centre
- ***Community and Public Outreach:*** Multiple instruments to engage high school teachers and students (min-enrichment courses, summer internships, ongoing liaison with teachers).
- ***Student Organizations*****:** Environmental activism and community projects.

PART III: TAKING ACTION

Conclusions and Recommendations

Overall, the research reported here shows, first and foremost, that Carleton University is deeply and broadly engaged with the Ottawa region in a rich and remarkable array of meaningful relationships that generate benefits to the University and to its local partner organizations. The "oxygen of community" flows continuously, in both directions, enhancing learning and generating innovation.

At the same time, the research indicates that much more could be done to further deepen and broaden the impact of Carleton's engagement with the Ottawa region. Any changes, however, must be undertaken within the financial constraints imposed by the economic recession on the University and its partner institutions.

That means, of course, starting modestly and small. However, much can be done at little or no cost. Existing actors and units within the University can be brought together to strengthen internal and external coordination with institutions in the region. Best-practices, lessons-learned and tools related to community engagement can be shared within and across Faculties. Those measures that require additional resources can be phased in over the next three to five years, as the University's financial situation stabilizes and as external funds are raised for community engagement.

This chapter presents 15 recommendations for action. Some of these measures can and should be instituted immediately, while others need to be worked on steadily over three to five years. These 15 recommendations are summarized in Figure 4.

It is, therefore, recommended that Carleton University:

DOCUMENT

1. ***Undertake and maintain a detailed inventory of CUE activities at Carleton.***
   A comprehensive survey should be conducted of Faculties, academic units, faculty members, research units and student organizations to document in detail their community-university engagement activities. The results of this survey should be input into a searchable online database to permit efficient monitoring and coordination of CUE within Carleton and with the local institutions that are Carleton's external partners. This action should be led by a new University Director of Partnerships and should be implemented through the combined efforts of the Carleton University Survey Centre, the Educational Development Centre, the Student Experience Office, and ICUE committee members.

CELEBRATE

2. ***Establish a series of awards for leadership in community-university engagement.*** The ingenuity, commitment and achievements of leaders of CUE initiatives among Carleton's faculty, staff and students, and among CUE leaders in local organizations in all sectors, deserve to be celebrated. To this end, a series of annual awards should be established and presided over by the President and advised by the Vice-Presidents and Deans. An awards selection committee of knowledgeable individuals inside and outside Carleton should be set up to assess nominations on behalf of the President and senior management.

STRENGTHEN AND EXPAND

3. ***Appoint a University Director of Partnerships.***
   In order to mobilize and integrate the efforts of both academic and service units in the drive to strengthen and expand CUE at Carleton, there needs to be a single focal point in the University whose mandate is to do just that. For this reason, the President, in consultation with the Vice-Presidents and Deans, should appoint a senior academic administrator, with proven commitment to and understanding of CUE, as Director of Partnerships. Among

other duties, the Director should animate, guide and monitor progress in the implementation of all the recommendations advanced in this report.

4. ***Strengthen the internal coordination of community-university engagement at Carleton University.***
   The Director of Partnerships should work with the members of both the Executive and ICUE to develop effective internal coordination mechanisms at both the senior-management and operational levels. Academic, research and student support units must be represented in these mechanisms, which would build long-term, comprehensive partnerships with local institutions, share best practices and methods for doing CUE, and systematically increase the scale of CUE activities. Figure 5 depicts the elements of such coordination mechanisms and how they would relate to the array of local institutions and sectors with which the University is already working.

5. ***Strengthen the external coordination of community-university engagement at Carleton.***
   At the same time, the University should test a number of mechanisms for external coordination. Three external coordination instruments have emerged recently and should be utilized and then assessed (see Figure 5). One is the Community-Based Research Network of Ottawa, whose strengths are based on its close relationships with non-profit, community-based organizations such as the community health centres and immigrant serving non-profits. Second, the No Community Left Behind initiative provides a useful route into the various departments and agencies of the City of Ottawa. A third instrument is the non-profit Ottawa Community Sustainability Partnership, which provides a window on local environmental organizations and their supporters. The Director of Partnerships should oversee the testing of the effectiveness of these instruments for external coordination over a period of three to five years.

6. ***Set up a research centre on community-university engagement.***
   Carleton University faculty members and graduate students from a range of disciplines (for example, Communication, Geography, Political Science, Public Policy and Social Work) are active in producing research and scholarship about the theory and practice of community-university engagement. The University is also active in pan-Canadian networks on CSL and CBR. In order to consolidate and extend this work, the Vice-President (Research and International), working with the Director of Partnerships, should set up a cross-Faculty, multidisciplinary research centre on community-university engagement.

7. ***Address community costs.***
   Especially among non-profit organizations (eg., in social services, human rights, environment and the arts), but also in major public and private sector institutions, community partners face opportunity costs in working with the University. The main opportunity cost is in the form of the staff time required to collaborate with professors on courses or research projects, supervise coop and practicum students, and generally to administer each relationship with the University. Another specific cost, particularly for activities on campus at Carleton, is parking. The Community-Based Research Network of Ottawa should work with non-profits to determine more precisely the nature and scope of their needs, in particular, related to costs. For both major and minor community costs, the Advancement Office of the University should be tasked to mobilize external funds that will help to reduce time and cash expenditures on the part of partners. These funds could be made available through a new Community Engagement Fund.

8. ***Align academic tenure and promotion incentives with community-university engagement.***
   There is also an important need to align tenure and promotion criteria for faculty members in a way that encourages, rather than discourages, community engagement on the part, especially, of early-stage and mid-career professors. One step would be to recognize, through course release or other measures, the additional time and work required to engage with community partners in teaching and research. Another is to find an appropriate way of valuing high-quality, peer-reviewed—but non-traditional—outputs arising from CUE-related activities. Vice-Presidents and Deans, working with ICUE members and in consultation with the faculty union, should gather information on the various ways in which universities and colleges in North America and Europe align their tenure and promotion policies with community-engaged scholarship and make concrete recommendations on this matter to management.

9. ***Deepen and expand capacity in community service learning.***
   The Educational Development Centre should continue and expand its work with individual faculty members to build their capacity in knowledge and skills in community service learning. The Student Experience Office and the teaching Faculties should be closely involved in this effort, as well, as should leading-edge CSL practitioners among faculty.

10. ***Intensify CUE across the "triangle" of experiential learning, community-based research and professional development.***
    Under the leadership of the Director of Partnerships, the University should systematically intensify its efforts in three areas at the same time: experiential learning (including co-op placements, internships, practicums, and field-based courses), community-based research (through centres and institutes as well as individual professors) and professional development programs with local institutions and constituencies. Figure 6 depicts this triangle.The Executive and ICUE members should be mobilized for this task.

11. ***Share best practices and tools for effective community engagement.***
    Within and across the teaching Faculties, there is rich experience among certain units and faculty members in best practices and tools for effective community engagement. The Educational Development Centre, working with Deans and their Faculties, should facilitate this exchange in an ongoing, regular manner. These resources should, in turn, be loaded onto an easily accessible, web-enabled platform.

12. ***Mobilize other university assets for community-university engagement.***
    Over the next five years, two other university assets should be mobilized to further advance community-university engagement. While Carleton's financial situation of Carleton University will be very tight for the next two to three years, once the economy begins to recover, a small portion of its *capital pools*—its pension fund and its endowment—should be made available for social investments in community projects, such as affordable housing and sustainable energy, that produce a market rate of return. In addition, the University should use its *purchasing power* to procure goods and services from non-profits and social enterprises. Both of these strategies would not only assist the community in measurable ways, but would also enhance the University's reputation for social responsibility. This effort should be led by the Director of Partnerships, in cooperation with the Executive and ICUE members.

13. ***Create a website of resources and tools for community-university engagement.*** Working with Deans and ICUE members, the EDC should set up a website that makes reports, case studies, program designs, evaluations and how-to guides available to faculty

members and students seeking to engage meaningfully with the Ottawa region.

14. ***Appoint CSL Advisors for each Faculty.*** While the Educational Development Centre and the Student Experience Office should play key roles in the expansion and deepening of Carleton's community engagement, the bulk of the CUE "action" occurs within the teaching Faculties. Accordingly, over the next five years, and when resources permit, CSL Advisors should be appointed by the Deans within each Faculty to advance the scale and quality of CSL programs and other experiential learning strategies. This is likely to be possible only in years three to five of the next five years.

15. ***Raise external funding for expanded CUE.*** In general, if community engagement is to become a larger part of Carleton University's core business, additional funds will need to be raised by the Advancement Office for this purpose. Working closely with the Vice-Presidents and Deans to implement the recommendations advanced here, the Advancement Office will constitute a key member of the University team that will take community engagement at Carleton to the next level.

Figure 4

Recommendations to Advance Community-University Engagement, 2009-2014

Action	Lead	Collaborators	Timeframe
DOCUMENT 1. Undertake and maintain a detailed inventory of CUE activities at Carleton	Director, Partnerships	EDC, SEO, CUSC, ICUE	2009-2014
CELEBRATE 2. Establish a series of awards for CUE leadership	President	VPs/Deans	2009-2010
STRENGTHEN AND EXPAND 3. Appoint a University Director of External Partnerships and CUE	President	VPs/Deans	2009
4. Strengthen Internal Coordination	Director, Partnerships	Executive, ICUE Members	2009-2012
5. Strengthen External Coordination	Director, Partnerships	CBRNO, NCLB, OCSP	2009-2012
6. Set up a Research Centre on CUE	OVPRI/Deans	ICUE Members	2009-2011
7. Address Community Costs	CBNRO	ICUE Members	2009-2012
8. Align University Incentives (Tenure and Promotion)	VPs, Deans	ICUE Members	2009-2014
9. Deepen and Expand Capacity in CSL	EDC-CSL Initiative	SEO, Faculties	2009-2012
10. Intensify CUE Across the "Triangle"	Director, Partnerships	Executive, ICUE Members	2009-2014
11. Share Best Practices and Tools	EDC/Faculties/Deans	All Academic and Research Units	2009-2012
12. Mobilize Other University Assets for CUE	Director, Partnerships	Executive, ICUE Members	2009-2014
13. Create a website of resources and tools for CUE	EDC	ICUE	2009-2010
14. Appoint CSL Advisors for each Faculty	Deans	Student Support Services	2009-2014
15. Raise external funding for expanded CUE	Advancement	VPs/Deans	2009-2014

Figure 5

Community Engagement Coordination Mechanisms

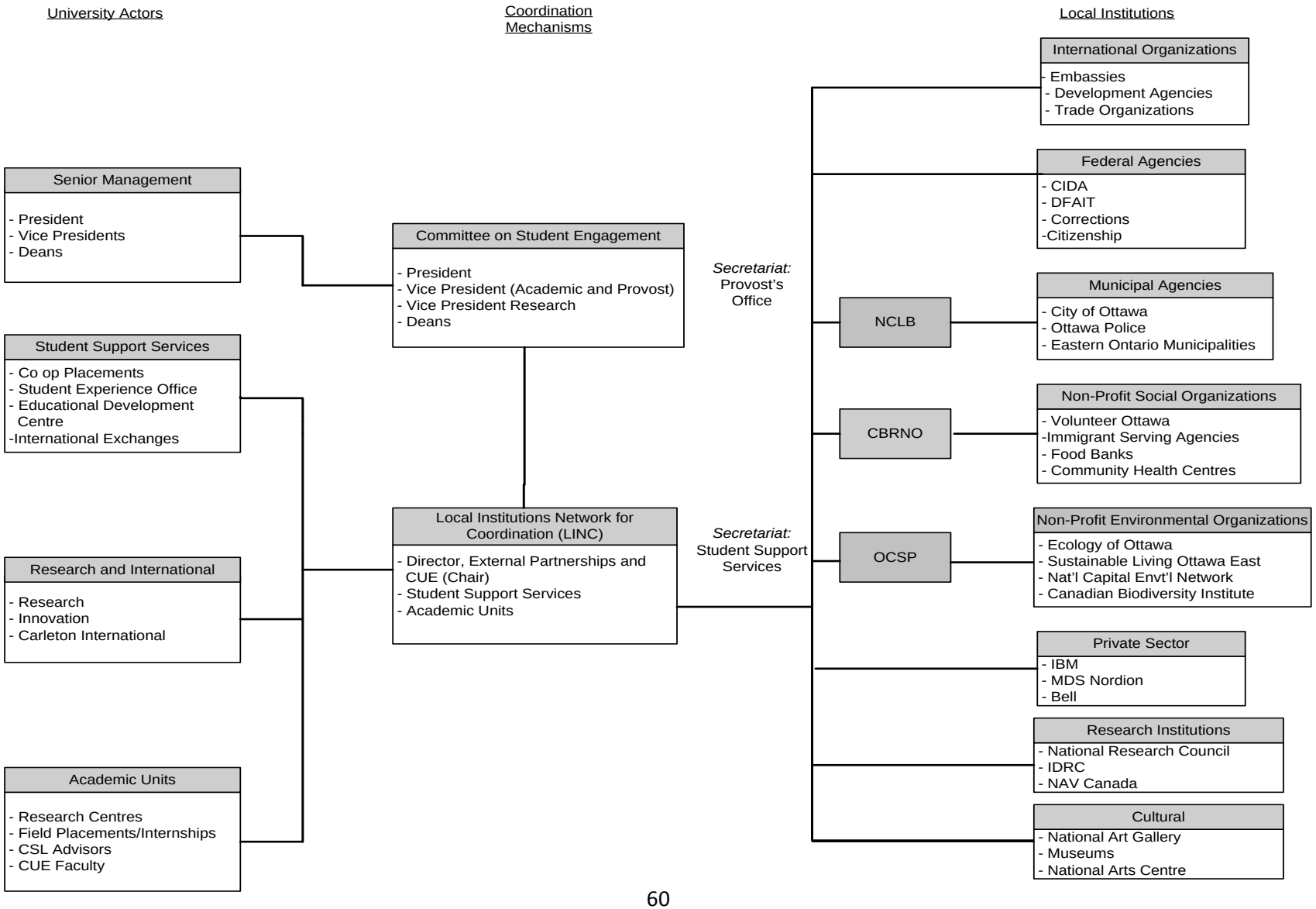
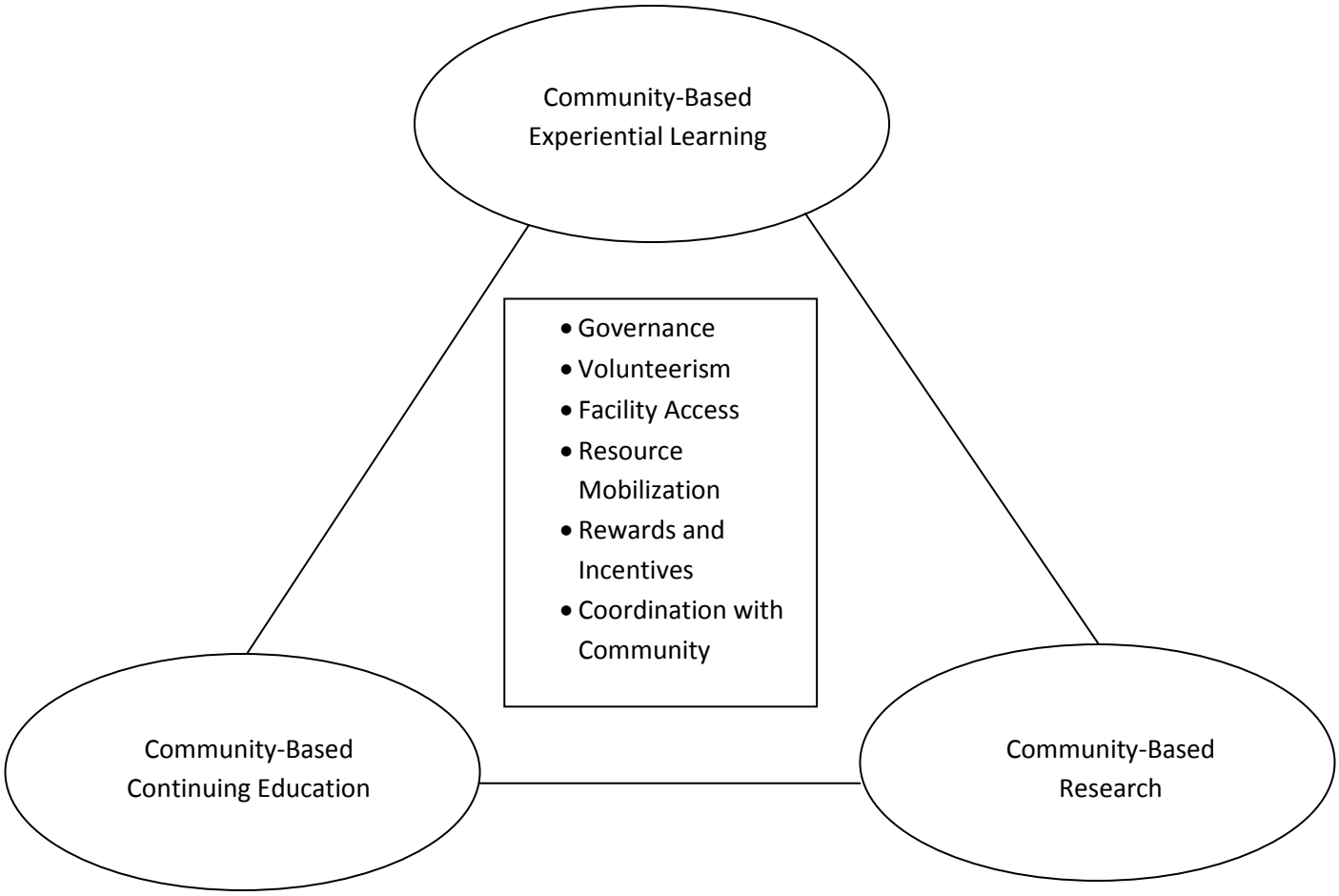


Figure 6

The Dynamic Triangle of Community-University Engagement



Next Steps

This report is intended to serve as a contribution toward the implementation of Carlton University's strategic plan, *Defining Dreams*. To this end, the report should be reviewed and considered by:

- The University Executive
- The Academic and Research Committee
- The Committee tasked by the strategic plan to examine partnerships with local institutions.
- Department Chairs and Directors
- Directors of the relevant service units

This process of review should be undertaken during spring 2009. Action on the recommendations advanced here should be taken in spring, summer and fall of 2009.

In the meantime, the Initiative for Community-University Engagement will further assess the findings reported here in order to inform its future efforts. In particular, the ICUE committee needs time to analyze in more detail the implications and opportunities embedded in the rich Faculty profiles presented in this report.

Much can be done to enhance the volume and velocity of the "oxygen" flowing between Carleton University and the Ottawa region. Deepening and expanding the University's partnerships with local organizations will enable us all to navigate through the challenging times and to build a positive, common future. We should celebrate our share achievements, and look ahead with hope and conviction.

Resources on Community-University Engagement

Action Research: An International Journal	*www.arj.sagepub.com*
Canadian Alliance for Community Service Learning	*www.communityservicelearning.ca*
Canadian Journal of University Continuing Education (Special Issue on Community Engagement, Spring, 2009)	*www.extension.usask.ca/CJUCE/eng/Eng1.html*
Community-Based Research Canada	*www.uvic.ca/ocbr*
Community-Based Research Network of Ottawa	*www.spcottawa.on.ca/cbrno_website*
Community-Campus Partnerships for Health	*www.depts.washington.edu/ccph*
Community University Exposition 2008, University of Victoria	*www.cuexpo2008.ca*
Community University Research Alliance Program, Social Sciences and Humanities Research Council	*www.sshrc.ca*
Gateways: International Journal of Community Research and Engagement	*epress.lib.uts.edu.au/ojs/index.php/ijcre/index*
Higher Education Network for Community Engagement	*www. Henceonline.org*
International Association for Research on Service Learning and Community Engagement	*www.researchslce.org*
Journal of Experiential Learning	*www.aee.org*
Living Knowledge Network (Europe)	*www.scienceshops.org*
Manifestation: Journal of Community Engaged Research and Learning	*www.manifestationjournal.org*
Michigan Journal for Community Service Learning	*www.umich.edu/~mjcsl*
Office of Community-Based Research, University of Victoria	*www.uvic.ca/ocbr*
Open Source Business Resource (Special Issue on Social Innovation, September 2008)	*www.osbr.ca*
Pew Partnership for Civic Change	*www.pew-partnership.org*
Trent Centre for Community-Based Education, Trent University	*www.trentu.ca/tccbe*