



Dawson College Annual Research Review

2013 – 2014

Office of Instructional Development
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Contents

Message from the Director General	4
<i>Research as an integral part of Dawson</i>	4
Message from the Dean of Instructional Development	5
Research Recognition Award Recipient 2013-2014	6
Overview of Research 2013-2014.....	7
<i>Research Inventory and New Directions for Growth</i>	8
<i>Research at Dawson College in 2013-14: Facts and Figures</i>	8
Social Sciences	10
<i>Economics</i>	10
<i>Geography</i>	10
<i>History & Classics</i>	11
<i>Psychology</i>	12
<i>Religion</i>	15
<i>Social Service</i>	15
<i>Sociology</i>	16
Creative and Applied Arts.....	16
<i>Computer Science</i>	16
<i>English</i>	16
<i>French</i>	18
<i>Fine Arts</i>	18
<i>Humanities</i>	19
<i>Industrial Design</i>	19
<i>Interactive Media Arts</i>	19
<i>Photography</i>	19
<i>Theatre</i>	20
Sciences, Medical Studies and Engineering	20
<i>Biology</i>	20
<i>Math</i>	20
<i>Mechanical Engineering Technology</i>	22
<i>Physical Education</i>	22
<i>Physics</i>	23
Pedagogical Research	23
AccessAbility Centre	25
CRISPESH.....	25



MESSAGE FROM THE DIRECTOR GENERAL

RESEARCH AS AN INTEGRAL PART OF DAWSON

As a public educational institution, Dawson College has included the following priority in its mission statement for over thirty years: "...to contribute to the intellectual, social and economic development of our society..."

Along with such values as accessibility, diversity and collegiality, excellence and innovation also figure prominently in our mission statement. Over the decades, this commitment to excellence and innovation on the part of the Dawson community has translated into an unmatched level of support for research activities. This research is often fundamental or applied in nature; it creates new knowledge and sometimes pioneers new pedagogical approaches. These varied initiatives complement one another to create a truly productive research community.

This willingness to support the development of research is very much a part of our College's DNA, and this for one simple reason: research is a means by which, as a learning community, we maintain our position at the leading edge of knowledge. This, by definition, allows us to succeed in our educational mission to the best of our ability.

While this review outlines the nature and scope of research initiatives taking place at Dawson College, my hope is that it not only serves to highlight these activities, but also to encourage others to step forward and embrace the role of researcher in parallel with their role as educators.

Our students deserve nothing less!

Richard Filion
Director General
May 13, 2014



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Office of Instructional Development

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MESSAGE FROM THE DEAN OF INSTRUCTIONAL DEVELOPMENT

It has been another busy and exciting year for the Dawson research community, with 14 active projects being conducted by college faculty and staff, representing just under \$600,000 in sponsored funding. These exceptional projects cover a wide range of research problems, from science, including math and technology, to the scholarship of teaching and learning, in the field of accessibility studies to literature and the arts. A large number of these projects are accomplished in collaboration with other colleges, universities both in Canada and abroad, as well as in partnership with local community organizations and domestic and international NGOs. These collaborative efforts benefit the Dawson community as well as the local and international ones by bringing together disparate viewpoints and allowing broad dissemination of findings.

Federal and provincial funding bodies, along with business and community institutions, have recognized the tremendous intellectual capacity and strong potential for developing productive partnerships within the college system. Colleges and Cégeps are recognized as being strongly positioned to solve real-world problems and address issues at a level that university research often overlooks. As a result, provincial and federal funding agencies are expanding support for research at the college level, including financing partnership opportunities between colleges, universities, industry and community organizations.

With the completion of an inventory of research activities and the Research Symposium that took place in April this year, the College is well-positioned to oversee the continued growth of research into the future. As an institution, we are in the process of formulating policies and procedures to support the development and growth of our researchers, including partnerships with industry and the community, and to refine our thinking where questions of intellectual property and collaboration are concerned.

Celebrate Research is our way of recognizing the dedication, passion and energy of faculty researchers (and their supporters) who push the boundaries of knowledge in their discipline to improve the lives of and enrich our experience. These projects have a positive impact on the College, their colleagues (both faculty and staff), students, as well as society at large.

I invite you to explore in this document the wide variety and superior quality of research going on at Dawson College, and I congratulate the passionate researchers on their tremendous accomplishments this year.

Barbara Freedman
Dean of Instructional Development
May 21, 2014

RESEARCH RECOGNITION AWARD RECIPIENT 2013-2014

Dr. Silvia d'Apollonia

Silvia d'Apollonia began teaching at Dawson College in 1995, after teaching for 16 years at Vanier College. She received a Ph.D. in Plant Physiology from King's College, University of London (1971) and a Ph.D. in the Special Individualized Program, Concordia University (1997). Her dissertation, *The dimensionality and validity of student ratings of instruction: two meta-analyses*, explored the beauty of meta-analyses, because of her keen and unique mind that can appreciate both the mathematics and the artistry of bringing together hundreds of disparate pieces of information. Later, she was drawn to another puzzle, examining how the mind works as it struggles to understand complex concepts and the very nature of complexity itself and how such ideas could be used to improve the ways students learn biology, as well as other sciences.

In 2007 Silvia set out to a bigger mission, the QEMSAP, (Quebec Educational Mathematics and Science Alignment Project). QEMSAP was formed in response to the Quebec Education Program reforms to the high school science curriculum and promoted the development of a community of practice among members of the secondary and Cégep sectors. This project resulted in her making the important contribution of improving the alignment between the two levels of education. And, later it would morph into a Chantier 3 grant between Dawson and UQAM, which provided yet another opportunity for Silvia to contribute to the College and her students with her expertise in Problem Based Learning (PBL).

While her time was now divided between meetings and teaching she never lost her love for research, to which she returned in 2010. All the while, she continued to be involved in advising and facilitating collaborations that promoted the next generation of pedagogical researchers at Dawson. In doing so, Silvia's influence has had a hand in helping to foster the research pursuits of colleagues such as Liz Charles, Chris Whittaker and Sameer Bhatnagar (at Dawson), Nathaniel Lasry and Michael Dugdale (John Abbott), and Kevin Lenton (Vanier). Silvia's knowledge, mentorship and guidance have been invaluable to them and many others at the College and beyond.

Silvia's prodigious research output includes over 43 published papers and support from over 12 research grants. In particular, her empirical work on group learning has helped to transform and increase the effectiveness of implementing cooperative and collaborative learning. Additionally, her contributions on the topic of students' evaluation of teaching effectiveness have added significantly to the field of pedagogical research. By incorporating active learning methods in her classrooms and identifying how they work (e.g. by helping students create deep conceptual networks), Silvia's research has greatly benefited her own students, Dawson College and the Cégep system as a whole.

- Contributed by Dr. Elizabeth Charles

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- Abrami, P. C., d'Apollonia, S., & Rosenfield, S. (2007). The Dimensionality of Student Ratings of Instruction: What We Know and What We Do Not*. In *The scholarship of teaching and learning in higher education: An evidence-based perspective* (pp. 385-456). Springer Netherlands.



OVERVIEW OF RESEARCH 2013-2014

Since Dawson College opened its doors in 1969, Dawson teacher-researchers have carried out transformative research across a broad range of fields. Dawson is widely recognized for research focusing on students with disabilities and in advocating for inclusion and accessibility through the CRISPESH research centre, which helps to disseminate innovative social practices in the field of disability studies.

Pedagogical research is also a focus, with numerous teacher-researchers implementing novel educational techniques in their classrooms, sharing their knowledge with each other and developing better tools and techniques to engage, motivate and inspire students.

In addition, Dawson is proud of the many faculty pursuing disciplinary research across all fields, including Chemistry, English, Geography, History, Math, and Physics. Dawson's teachers' strong record of success in securing grants from the FRQNT, FRQSC, PAREA and SSHRC demonstrate the high calibre of faculty researchers working at the College.

RESEARCH INVENTORY AND NEW DIRECTIONS FOR GROWTH

Director General Richard Filion, in his Community Address of August 20, 2013, set out specific objectives with respect to evaluating research at the College. In response to this directive, the Research Office in the OID, in

collaboration with external consultants, completed a full review of Dawson's research portfolio, and organized a Research Symposium which took place on April 17th to share these findings with the community. Based on this information, the College is in the process of "establishing new directions that will

Over the last 30 years, Dawson has distinguished itself by conducting research activities like no other college in Quebec and even country-wide. Research in and of itself is a good thing, but research in a college like Dawson helps to create an environment that favours the development of innovative practices and the pursuit of excellence.

Richard Filion, August 20, 2013

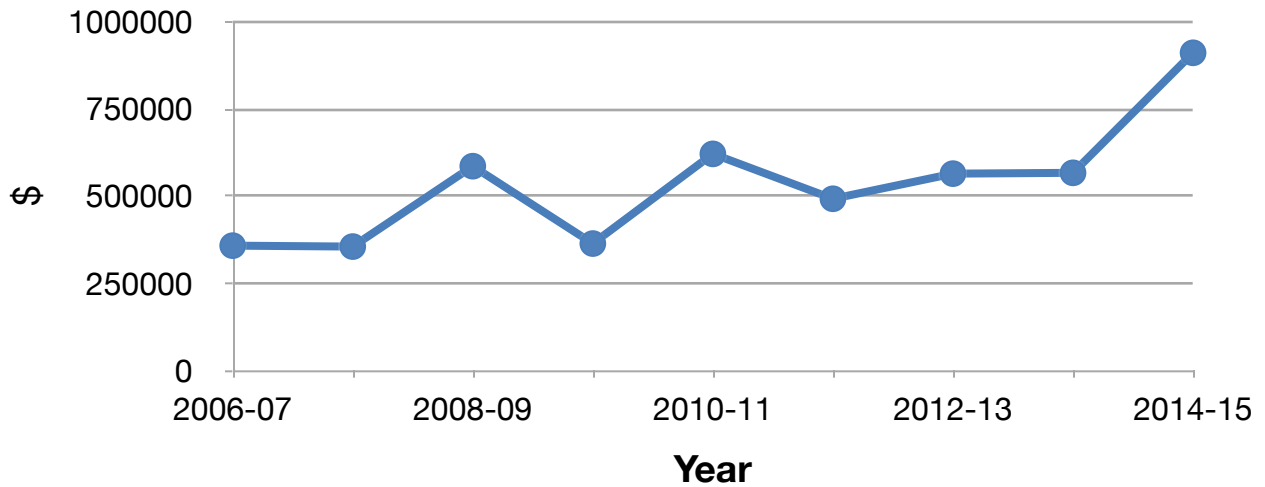
create ideal conditions for the implementation of a new landscape of research at Dawson, leading to increased faculty participation and public funding." (Community Address, August 2013). Over the next year, we plan to solicit community input to develop a plan for identifying and pursuing these new directions in research.

RESEARCH AT DAWSON COLLEGE IN 2013-14: FACTS AND FIGURES

Over the past eight years, the amount of sponsored funding brought into the College by research grants has grown from \$357,672 in 2006-07 to \$566,371 in 2013-14. In the past year, 18 research projects were funded by provincial and national funding agencies including PAREA, FRQSC, FRQNT, and SSHRC. Fourteen funded researchers and a number of researchers working on projects independently have been involved in projects across disparate disciplines - including math, history, accessibility, literature, pedagogy and sustainability.

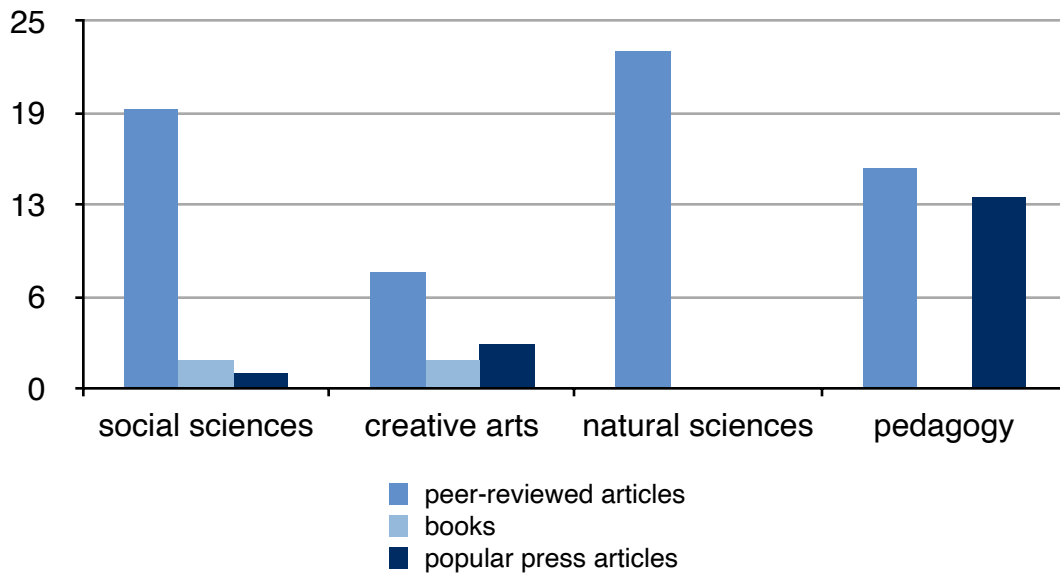
The future is looking brighter than ever. So far, confirmed external funding for 2014-15 totals \$910,319, the highest amount since we began tracking these data (see Figure 1). Among these most recent awardees are a number of emerging researchers who have secured external funding for their projects, setting the stage for long, productive research careers.

Figure 1. Annual Sponsored Funding



Not only do Dawson researchers bring in a large number of external awards, they also generate a large number of research papers, books, conference papers and other scholarly output (see Figure 2). Outreach activities are also an important component of most research, and our faculty are extremely active in giving seminars, talks, courses and sessions to disseminate their findings across a wide audience.

Figure 2. Scholarly Output by Field



In the following sections, we present a snapshot of the research conducted over the past year at the College. While we tried to be as comprehensive as possible, there are likely more activities going on of which we are not aware. Regardless, the depth and breadth of research activity at the College is impressive, and we are confident that this stellar record will continue and expand in the years to come.

SOCIAL SCIENCES

ECONOMICS

Gert Janssens uses dynamic game theory and modelling in his research in economics. He is currently working on a PhD from HEC. This year, he published the following paper:

Janssens, G. & G. Zaccour (in press) Strategic price subsidies. *Automatica*.

GEOGRAPHY

Jeffrey Barnes' research explores the use of culturally significant materials, and last year, he published:

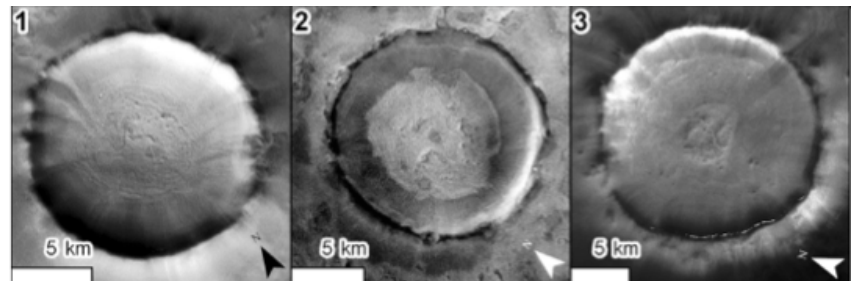
Binning SA, Barnes JI, Davies JN, Backwell PRY, Keogh JS, Roche DG (in press) Ectoparasites modify escape behaviour, but not performance, in a coral reef fish. *Animal Behaviour*

Barnes, JI. (2013) "Where Chocolate Begins and Research Methods End: Understanding Kuna Cacao Consumption." *Human Organization* 72(3): 211-219.

Gisela Frias' IDRC funded "Sustainable Campuses" participatory action project has been successfully completed, with the production of a 50-page final report and many action projects accomplished. Gisela and her partners plan to continue and expand the project to help post-secondary institutions in Canada and Mexico incorporate more sustainable practices in institutional functioning and educational approaches.

Richard Soare's research focuses on geological landscapes of Mars. He is participating in a team of international planetary-scientists (funded by the Leverhulme Trust, U.K.) that will travel

to the Parc national de la Vanoise in the Savoie region of France this summer. The aim is to map (and geo-reference) the location and distribution of various periglacial landforms in the region, and to develop



Possible evidence of peri-glacial land formations on Mars (Soare et al., 2013)

cross-sectional profiles of these landforms by means of a ground penetrating radar. He published the following papers in 2013-14, including two co-authored by fellow Geography faculty **Geoff Pearce**:

Soare, R.J., Conway, S.J., and Dohm, J.M. (2014a). Possible ice-wedge polygons and recent landscape modification by “wet” periglacial processes in and around the Argyre impact basin, *Mars Icarus* 223, 214-228

Soare, R.J., Conway, S.J., Dohm, J.M., and El-Maarry, M.R. (2014b). Possible open-system pingos in and around the Argyre impact basin, Mars. (EPSL, accepted).

Dohm, J.M., Miyamoto, H., Maruyama, S., Baker, V.R., Anderson, R.C., Hynek, B.M., Robbins, S.J., Ori, G., Komatsu, G., El Maarry, M.R., Soare, R.J., Mahaney, W.C., Kim, R., Hare, T.M. (2013a). *Mars evolution*, 7-39, in *Mars Evolution, geology and exploration* (ed.), Fairen, A.G., New York, Nova Science Publishers.

Soare, R.J., Conway, S.J., Pearce, G., Costard, F.N., and Séjourné, A. (2013b). Sub-kilometre (intra-crater) mounds in Utopia Planitia, Mars: geological evidence of a glacial origin? *Icarus*, doi.org/10.1016/j.icarus.2012.06.003.

Soare, R.J., Conway, S.J., Pearce, G., Dohm, J.M., and Grindrod, P.M. (2013c). Possible crater-based pingos, paleolakes and periglacial landscapes in the high latitudes of Utopia Planitia, Mars. *Icarus*, doi.org/10.1016/j.icarus.2012.08.041.

HISTORY & CLASSICS



Frederic Bastien, who studies constitutional history, published the book “La Bataille de Londres” in 2013, and has been speaking on the topic across North America and Europe. The book will be translated into English next year by Dundurn Press.

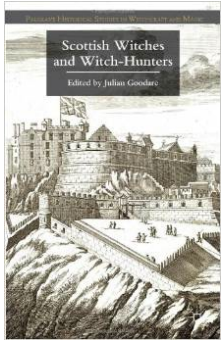
Janice Harvey has received a four year grant from FRQSC as part of a team of researchers from UQAM on the project « Le gouvernement de la misère et la citoyenneté : pauvreté, maladie et crime dans l'histoire du Québec. » Last year, she completed a draft of her latest book *Montreal ladies and poor children: Conservative benevolence and child charities in a nineteenth century city*. She is researching the institution for Montreal youth called the Boys’ Home in terms of risk and from the perspective of citizenship.

Another project looks at the elderly in Montreal using the former Montreal House of Industry and Refuge as a focus.

Elizabeth Kirkland’s is funded by the FRQSC team grant for the project « Modernité et légitimité a Montréal, 1800-2010». Her current research looks at the experiences of Montreal women in international settings during the first two decades of the 20th century - one woman in

London, England, the other in Paris, France. She will be presenting a paper at the Canadian Historical Association entitled “Lady Julia Drummond and Her Transatlantic Move *Home* during the Great War”.

Marc Beauchamp and Ben Lander's research uses an innovative pedagogical approach to train students in research, by engaging them in collecting and analyzing oral histories from people in Montreal. They have received funding from the FQRSC Projets Novateurs program for the next two years.



Michael Wasser studies the social, legal, and political history of Scotland in the early modern period. He published "Scotland's First Witch-Hunt: the Eastern Witch-Hunt of 1568-1569" in Julian Goodare, ed. *Scottish Witches and Witch-Hunters*, New York, Palgrave Macmillan, 2013, pp 17-33. He is currently working on a book to be titled “Violence on Trial: Elite Violence and State-Building in Scotland 1573-1638”.

PSYCHOLOGY

Catherine Fichten's research focusses on two areas; facilitating the postsecondary education of students with disabilities (within the ADAPTECH research network, which she directs) and sleep issues, including insomnia, sleep apnea, non-refreshing sleep, and chronic fatigue syndrome. She was awarded funding from the FQRSC Reussite Scholaire for her three-year project “Les perspectives des étudiants et des professeurs sur l'excellence dans l'utilisation des TIC et du cyberapprentissage au collégial » (total awarded \$432,000). This project will continue her work in the field of student learning and technology in the classroom. She is also the Principal Investigator of a three-year FRQNT grant for college researchers “Mesure objective de l'attention et de la somnolence au volant” (total awarded \$100,000) and a co-investigator on a Concordia-led FQRSC grant on the six-year project “Centre d'études sur l'apprentissage et la performance (CEAP)” (total awarded to Dr. Fichten \$186,000). She and her team have presented their findings at a number of conferences and invited addresses.

Peer-reviewed journal articles:

Fichten, C.S., Nguyen, M.N., Budd, J., Barile, M., Asuncion, J., Jorgensen, M., Amsel, R., & Tibbs, A. (in press). College and university students with disabilities: “Modifiable” personal and school related factors pertinent to grades and graduation. *Journal of Postsecondary Education and Disability*.

Fichten, C.S., Nguyen, M.N., King, L., Havel, A., Mimouni, Z., Barile, M., Budd, J., Jorgensen, S., Chauvin, A., & Gutberg, J. (2014). How well do they read? Brief English and French screening tools for college students. *International Journal of Special Education*, 29(1), 33-46.

Barile, M., Fichten, C.S., Jorgensen, S. & Havel, A. (2013). Employment opportunities for graduates with disabilities: A step forward. *Review of Disability Studies: An International Journal*, 8(4), 46-56.

Fichten, C. S., Nguyen, M. N., King, L., Barile, M., Havel, A., Mimouni, Z., Chauvin, A., Budd, J., Raymond, O., Juhel, J.-C., & Asuncion, J. (2013). Portrait de l'utilisation des TIC par les collégiens ayant des troubles d'apprentissage, les bons lecteurs et les très faibles lecteurs. *Pédagogie collégiale*, 26(4), 38-42.

Fichten, C. S., Nguyen, M. N., King, L., Barile, M., Havel, A., Mimouni, Z., Chauvin, A., Budd, J., Raymond, O., Juhel, J.-C., & Asuncion, J. (2013). Information and communication technology profiles of college students with learning disabilities and adequate and very poor readers. *Journal of Education and Learning*, 2(1), 176-188.

Fichten, C.S., Creti, L., Rizzo, D., Bailes, S., Baltzan, M., Amsel, R. & Libman, E. (2013). Do all individuals with sleep apnea suffer from daytime sleepiness? A preliminary investigation. *Journal of Health Psychology*, 18(6), 750 - 761.

Rios Romenets, S., Creti, L., Fichten, C., Bailes, S., Libman, E., Pelletier, A., & Postuma, R.A. (2013). Doxepin and cognitive behavioural therapy for insomnia in patients with Parkinson's disease: A randomized study. *Parkinsonism and Related Disorders*, 19(7), 670-675.

Popular Press Articles:

Fichten, C. (in press). Jobs then – and now. In Council of Canadians with Disabilities (Ed.). *Getting and keeping a job—what makes a difference*. Winnipeg, Manitoba: Council of Canadians with Disabilities.



Jorgensen, M., Nguyen, M.N., Budd, J., Jorgensen, S., Fichten, C.S., Henderson, T. (in press). Employment opportunities for college and university graduates with a learning disability. LDAQ Chapter 1 Newsletter.

Budd, J. & Fichten, C.S. (2013). Free and inexpensive information and communication technologies can help students with learning disabilities in college. *Association québécoise des troubles d'apprentissage (AQETA)*.

Budd, J. & Fichten, C.S. (2013). Les technologies de l'information et de la communication gratuites ou abordables peuvent aider les étudiants ayant des troubles d'apprentissage au cégep. *Rendez VOUS: Journal of the Association québécoise des troubles d'apprentissage (AQETA)*, 27(1), 42-43.

Barile, M., Fichten, C.S., Jorgensen, M., & Nguyen, M.N. (2013). Démystifier les TA au cégep et sur le marché du travail. *Rendez- vous : Journal of the Association québécoise des troubles d'apprentissage (AQETA)*, 27(1), 30-31.

Barile, M., Fichten, C.S., Jorgensen, M., & Nguyen, M.N. (2013). Demystifying LD at college and in the workplace. *Association québécoise des troubles d'apprentissage (AQETA)*.

Barile, M., Mimouni, Z., Nguyen, M.N., & Fichten, C.S. (2013). Les TIC : des outils pour l'accessibilité universelle en pédagogie. *Profweb*.

Barile, M., Fichten, C.S., Jorgensen, M. & Nguyen, M. (2013). University degree key to success for youth with disabilities. *Moxie – IL-M Newsletter*, 9(3), 2-4. / *Le diplôme universitaire est la clé du succès des jeunes en situation de handicap, Le Futé – Bulletin de VH-M*, 9(3), 2-4.

Barile, M., Mimouni, Z., Nguyen, M.N., & Fichten, C.S. (2013). ICTs: Tools for universal design for instruction. Profweb.

Jorgensen, M., Fichten, C.S., Martiniello, N., Nguyen, M.N., Barile, M., Budd, J., & Amsel, R. (2013). Employment of postsecondary graduates with disabilities: Shattering the myths. *Communiqué*, 13(2), 15-17.

Fichten, C., Nguyen, M.N., Jorgensen, M., Barile, M., Budd, J., Asuncion, J., Martiniello, N., & Tibbs, A. (in press). Job prospects favorable for recent Canadian college and university graduates with disabilities: Preliminary results of an Adaptech Research Network cross-Canada study. NEADS Media.

Chauvin, A., King, L., Nguyen, M.N., Budd, J., Jorgenson, M., Barile, M., & Fichten, C. (2013, March 18). Free and inexpensive ICTs for students with disabilities. Profweb Column.

Chauvin, A., King, L., Nguyen, M.N., Budd, J., Jorgenson, M., Barile, M., & Fichten, C. (2013, March 18). Des TIC gratuites ou peu coûteuses pour les étudiants en situation de handicap. Profweb Chroniques.

Dawson grad and Adaptech student for the past 7 years **Jillian Budd** has been awarded the Joseph-Armand Bombardier Canada Graduate Scholarship to support her doctoral studies, which she will begin at McGill this Fall.

One of Dr. Fichten's research assistants, **Gabrielle Lesage**, a graduating Dawson student, wrote an article for The Plant entitled "A new experience: working at the ADAPTECH Research Network" (March 6, 2014).

Sam Parkovnick is working on a historical review of social psychology during World War II. He will present a paper at the annual meeting of Cheiron in Maryland this summer.

John Ranellucci is interested in how to motivate students and encourage them to exert control over their studies. Last year, he published the following articles:

Muis, K. R., Duffy, M., Trevors, G., Ranellucci, J., & Foy, M. J. (2014). What were they thinking? Using cognitive interviewing to examine the validity of self-reported epistemic beliefs. *International Education Research*, 2, 17-32.

Muis, K. R., Ranellucci, J., Franco, G. M., & Crippen, K. (2013). The interactive effects of personal achievement goals and performance feedback in an undergraduate science class. *Journal of Experimental Education*, 81, 556-578.

Ranellucci, J., Muis, K. R., Duffy, M., Wang, X., Sampasivam, L., & Franco, G. M. (2013). To master or perform? Exploring relations between achievement goals and conceptual change learning. *British Journal of Educational Psychology*, 83, 431-451.

Lajoie, S., Hong, Y. J., Naismith, L., Poitras, E., Cruz-Panesso, I, Ranellucci, J., & Wiseman, J. (2013). Technology rich tools to support self-regulated learning and performance in medicine. Chapter accepted in R. Azevedo & V. Aleven (Eds.).

International Handbook of Metacognition and Learning Technologies. New York, NY: Springer.



Shelagh Robinson's research investigates the effect of reading backwards text ("Mirror reading") on cognition. She has created a free iTunes App called "Mirror Read". Together with Dawson grad **Kyle Hantzis**, she has created a specialized Mirror Bookmark for computer users. This very new technology offers an easy way to mirror-reverse the formatting of websites <http://www.mirrorread.com/#!mirror-bookmark/c20hh>.



Psychology students present results of their research during Brain Week

RELIGION

Boustan Hirji published a book entitled 'Sijistani's Design for Enlightenment' with Shamas Nanji in March 2014, about a tenth century Islamic Philosopher and his concepts of ethics and human responsibility.

SOCIAL SERVICE

Denise Brend studies PTSD and relational workers by exploring helpers' emotional experiences and how they manifest in organizations. Last year, she gave several conference presentations and published the following papers:

Fletcher, K.L., Nutton, J., Brend, D.M. (in press) Attachment, A Matter of Substance: The Potential of Attachment Theory in the Treatment of Addictions. *Clinical Social Work Journal*.

Brend, D.M. (in press) A Dialogue Between Theories: Understanding Trauma in Helping Professionals. *Intervention*, 14.

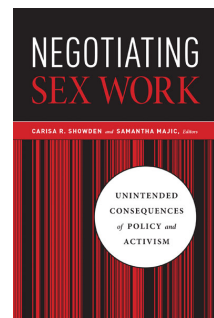
Brend, D.M., Fletcher, K.L., Nutton, J. (2013) With Laura: Attachment and the healing potential of substitute caregivers within cross-cultural child welfare practice. *First Peoples Child & Family Review*, 7(2).

Martine Wizman presented in June 2013 at the Access conference, a cross-Canada association of college level social service work teachers.

The **3rd year Dawson Social Service class** organized a series of awareness and outreach events on Human Trafficking. They also participated in the Coldest Night of the Year walk in February to raise awareness about homelessness and to raise funds for St. James Drop-in.

SOCIOLOGY

Sarah Beer (with Francine Tremblay) published "Sex Workers' Rights Organizations and Government Funding in Canada" in C. Showden and Samantha Majic (eds.) *Negotiating Sex Work: Unintended Consequences of Policy and Activism*. Minneapolis, MN: University of Minnesota Press, pp. 287-309.



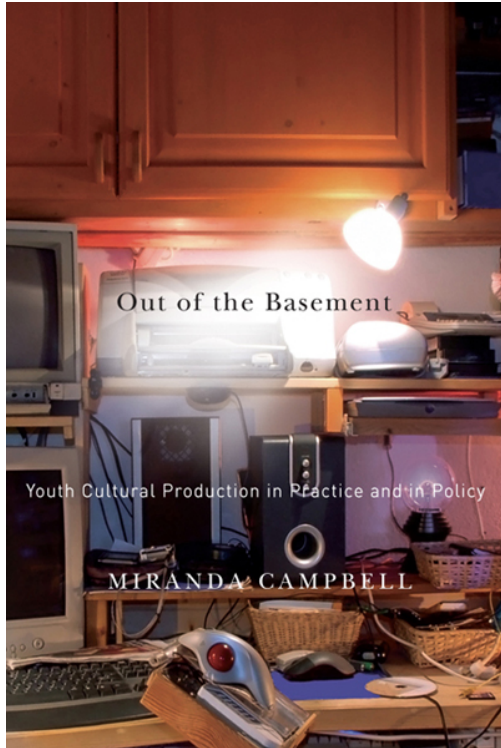
CREATIVE AND APPLIED ARTS

COMPUTER SCIENCE

Patricia Campbell hosted an Hour of code in December 2013 (with Maja Frydryhowicz).

ENGLISH

Patrick Barnard published an article in Montreal Serai entitled: "Migration -- The Moving Other" (April 2014).

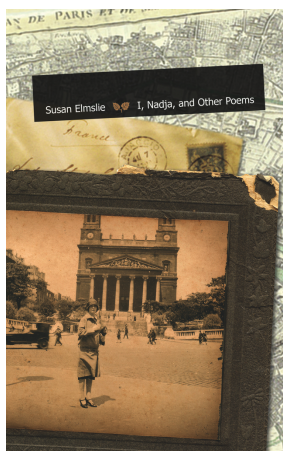
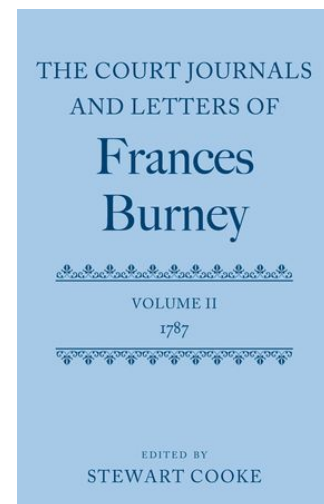


Miranda Campbell published the book *Out of the Basement: Youth Cultural Production in Practice and in Policy* (McGill Queens University Press, 2013). This book has been shortlisted for the Donner Prize for the Best Public Policy Book by a Canadian and the Gertrude Robinson Book Prize for the Best Public Communication Studies Book in Canada. In the past year, she published the following papers:

Creative Entrepreneurship and the Cultural Industry, In *Revisiting Subcultures: From Art to Resistance to Creative Innovation*. Steven Malliet, Alexander Dhoest, Jacques Haers, Barbara Segaert, Eds. (in press)

Poverty or Privilege? Building Community through Unpaid Internships in the Music Industry. In Special Issue of *tripleC: Communication, Capitalism & Critique: Interrogating Internships*. Nicole Cohen, Enda Brophy, Greig de Peuter, Eds. (in press)

Stewart Cooke's SSHRC-funded research synthesizes archival material relating to the 18th century novelist Frances Burney. This year, he was awarded another three-year SSHRC Insight grant to edit a volume of the scholarly edition of the letters of Charles Burney (total value \$101,847). Dr. Cooke's work has resulted in several edited volumes and conference presentations on the topic.



Susan Elmslie was invited to give two long performances in French of poems from her book titled, *I, Nadja, and Other Poems* (Brick 2006). She had a poem shortlisted in the PRISM International poetry competition and published two poems in the current issue of *The New Quarterly*.

Marie Thérèse Blanc published "White Law, Native Norms and Greed in Canadian History and Literature" in *Montreal Serai* (March 2013).

David Gelineau researches late seventeenth-century literature. His article “*The Country Wife, Dance of the Cuckolds*” will be published in *Comparative Drama* (2014).

Louisa Hadley published the book “*Responding to Margaret Thatcher's Death: #Nowthatcherisdead.*” (Palgrave Pivot, April 2014). She was interviewed on 8 April 2013 by CTV about Margaret Thatcher’s death.

Kristopher Woofter published the following articles:

“Watchers in the Woods: Meta-Horror, Genre Hybridity, and Reality TV Critique in *The Cabin in the Woods*.” (2014) Reading Joss Whedon. Edited by Rhonda Wilcox, Tanya Cochran and Cynthia Masson. Syracuse: Syracuse University Press.

Journal Special Issue Co-Editor (with Jasie Stokes) “‘We Are Not Who We Are’: Critical Perspectives on *Cabin in the Woods* (2012).” (2014) Special Issue of *Slayage: The Journal of the Whedon Studies Association*. 10.2/11.1 (36-37) Journal Editors, David Lavery and Rhonda Wilcox.

Introduction. “Once More Into the Woods: An Introduction and Provocation.” (with Jasie Stokes). “‘We Are Not Who We Are’: Critical Perspectives on *Cabin in the Woods* (2012).” (2014) Special Issue of *Slayage: The Journal of the Whedon Studies Association*. 10.2/11.1 (36-37) Journal Editors, David Lavery and Rhonda Wilcox.

He gave an interview (with Dr. Stacey Abbott, Dr. Lorna Jowett and Dr. Mike Starr). “‘Fan(g)-Scholarship’: TV Fangdom: A Conference on Television Vampires.” *Fangoria*. (June 2013)

Sabine Sautter-Leger had the short story "Visitors" published in *The Dalhousie Review* 93.2 (Summer 2013): 205-7.

FRENCH

Adeline Caute published the article « "Et moi, moi aujourd'hui" : disparition et dérive identitaires du personnage dans *V.O. d'Eva Almassy* (1997) », dossier « Le roman contemporain au détriment du personnage », *L'Esprit Créateur. The International Quarterly of French and Francophone Studies*, Spring 2014, vol. 54, no. 1, p. 35-46. Her doctoral dissertation won two awards, Prix de thèse en cotutelle France-Québec and Prix scientifique Anne Hébert.

FINE ARTS

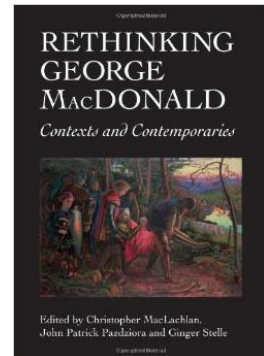


Claude Arseneault is experimenting with eco-friendly screen printing products for silkscreen and non-toxic water-based inks for intaglio to make the printing process safer for students and more environmentally friendly.

HUMANITIES

Maia Johnson-Stepenberg has been working on a forthcoming book on the relationship between Nietzsche and Dostoevsky.

Jennifer Koopman published "Gothic Degeneration and Romantic Rebirth in Donal Grant." In *Rethinking George MacDonald: Contexts and Contemporaries* (eds. Chris MacLaughlin, John Pazdziora, and Ginger Stelle. Glasgow: Scottish Literature International, 2013). She is also the editor of *Orts: The Newsletter of the George MacDonald Society*.



Joseph Rosen wrote an article, "The Israel Taboo", for *The Walrus* based on his academic research into traumatic collective memory, ethics, and the Israeli-Palestinian conflict. He was interviewed by Jian Ghomeshi for the CBC radio program *Q*, and also gave talks in Toronto and Montreal.

Beverly Sing showed her original artwork Japanese brush calligraphy scroll at several exhibitions. She was awarded the Prix d'excellence for a Japanese brush calligraphy scroll (Haiku poem "Violets on a mountain path") at the 42nd Exhibition of the International Calligraphy Association in Tokyo, Japan (March 1-8, 2014, Tokyo Metropolitan Art Museum, Japan). She is also working on a paper, a book and several conference presentations.

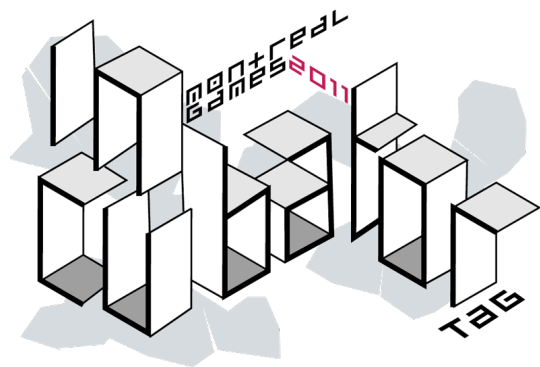
Michael Wood presented several papers on religious studies at various conferences and panels in Canada.

INDUSTRIAL DESIGN

Michel Seguin is working on a collaboration for industrial design with industry partners.

INTERACTIVE MEDIA ARTS

Shawn Bell organized the Dawson Game Jam (March 14-16, 2014), and is involved with research at the TAG Montreal Games Incubator with Concordia University.



PHOTOGRAPHY

Joel Silverstein is a teacher/mentor in an Educational Program for Blue Metropolis called Quebec Roots.

THEATRE

W. Steven Lecky and **Elissa Bernstein** have developed the Vox Method for acting
www.voxmethod.com

SCIENCES, MEDICAL STUDIES AND ENGINEERING

BIOLOGY

Virginia Hock published the following paper:

Establishing abiotic and biotic factors necessary for reliable male pheromone production and attraction to pheromones by female plum curculios *Conotrachelus nenuphar* (Coleoptera: Curculionidae). *Canadian Entomologist* (2014).

MATH

Richard Fournier's research on polynomials is funded by two FRQNT grants (Programme de recherche pour les enseignants de Collège and a team grant, total value \$232,440). In 2013-14, he will have published the following papers:

'Discrete Bernstein Inequalities for polynomials', 60 years of analytic functions in Lublin- In memory of our professors and friends Jan G. Krzyz, Zdislaw Lewandowski and Wojciech Szapiel, *Monogr. Univ. Econ. Innov. Lublin, Lublin, 2013, 139-143. (2013)*

"A note on an interpolation formula", *Journal of Interpolation and Approximation in Scientific Computing (JIASC - electronic)*, doi: 10.5899/2013/jiasc-00028, (2013).

"A New Class of Inequalities for Polynomials", accepted for publication in *Rocky Mountain Journal of Mathematics*, 2013.

"Jack's Lemma and a Class of Polynomial Inequalities", accepted for publication in *Mathematica (Cluj)*, 2013.

'Discrete Bernstein Inequalities for polynomials', *Math. Inequal. Appl.* 17 (2014), 241-248.

(with D. Kleiman et J.Litwin), "Fibonacci-type Sequences" , to appear in *Dawson Research Journal of Experimental Science*, 2014.

(with H. Barnaby) ,“A Proof of Riemann’s Rearrangement Theorem for Alternating Series” to appear in Dawson Research Journal of Experimental Science, 2014.

“Bound-preserving operators and the maximum modulus of polynomials”, accepted for publication in Computational Methods and Function Theory, 2014

Wee Keong Lim published the following papers:

S.Sankaraiah, H.S.Lam, C.Eswaran, W.K. Lim, Implementation of highly scalable video encoder on multicore platform using GOP level parallelism, submitted to Journal of Visual Communication and Image Representation

W.K. Lim, On the geodesics on the tangent bundle of a Riemannian manifold with Sasaki metric, submitted to International Journal of Mathematics

J. L. Chua, Y. C. Chang, W. K. Lim, A Simple Vision Based Fall Detection Technique for Indoor Video Surveillance, Signal, Image and Video Processing, May, 2013.

C.S. Tan, X. Wang, Y.H. Ng, W.K. Lim, C.T. Yuen, Preliminary study of the surface compensation technique for multi-layer gated wavefront sensing, J. Europ. Opt. Soc. Rap. Public. 8, 13034, 2013.

Ben Seamone was awarded an FRQNT research grant for 2014-17 on "A study on path and cycle based properties of graphs" (total value of \$137,160). He published the following papers:

On uniquely Hamiltonian claw-free and triangle-free graphs, accepted to *Discussiones Mathematicae Graph Theory* (2014).

Hamiltonian chordal graphs are not cycle extendible, accepted to *Society for Industrial and Applied Mathematics (SIAM) Journal on Discrete Mathematics* (2014) (with M. Lafond).

Stefan Soltuz published the following paper:

Ştefan M. Şoltuz, B.E. Rhoades, A mixed iteration for nonnegative matrix factorizations, *Applied Mathematics and Computation*, Volume 219, Issue 18, 15 May 2013, Pages 9847–9855.

Kengatharam Thirulogasanthar published the following papers:

K. Thirulogasanthar, S. Twareque Ali, Regular subspaces of a quaternionic Hilbert space from quaternionic Hilbert spaces and associated coherent states, *J. Math. Phys.* 54 (2013), 013506.

K. Thirulogasanthar, Coherent states for an abstract Hamiltonian with a general spectrum, In Proceedings of Jaffna University international research conference (JUICE-2012), pp. 270-280, ISBN:955056503-4, published 2014, Srilanka. Eds: B. Nimalanathan, A. Ramanan, K. Thabotharan.



Math students presenting their research during the Math Awards ceremony

Math students **Dylan Alexander, Dylan Cant, Jason and Kevin Da Silva Castanheira, Ilya Gromovikov, Fredric Lam and Michael Saraga** worked with math faculty on independent research projects, and presented their results during the annual Math Awards ceremony on May 1st.

MECHANICAL ENGINEERING TECHNOLOGY

Keven Chan and Christian David, students in Mechanical Engineering Technology, won the Prix du mérite from the Fédération des Cégeps. Valued at \$1,000 the award recognizes the team that submitted the best oral presentation, performance and design of its project, as well as the team that used the most recycled material in the construction of its engine.

PHYSICAL EDUCATION

Joanna Farmer has written a screenplay called “My Quiet Revolution” about a teenage girl’s coming of age in Montreal in 1967.

PHYSICAL REHABILITATION

Sharon Clegg is part of a research project with UdeM and Marie Victorin called TEKPHY using technology such as smartphones, Wii Balance board and Kinect to treat and assess patients.

<https://www.facebook.com/projettekphy>

PHYSICS

Jonathon Sumner's research uses mathematical models to simulate air flow around wind turbines. He was awarded an FRQNT research grant for 2014-17 on "Simulation des écoulements atmosphériques dans un parc éolien afin d'évaluer sa performance et maximiser son rendement à partir des équations de Navier-Stokes" (total value of \$137,160). Last year, he published the following papers:

Sumner, J., Espana, G., Masson, C., & Aubrun, S. (2013). Evaluation of RANS/actuator disk modelling of wind turbine wake flow using wind tunnel measurements. *International Journal of Engineering Systems Modelling and Simulation*, 5(1), 147-158.

Sumner, J., Cabezón, D., Masson, C., & Crespo, A. (2014). A Closer Look at Second-Moment Closure for Wind Farm Analysis. In *Wind Energy-Impact of Turbulence* (pp. 93-99). Springer Berlin Heidelberg.

Manuel Toharia published the following papers:

C.Hamzaoui, S.Nasri and M.Toharia, "Partial $\mu - \tau$ Textures and Leptogenesis," UQAM-PHE (in press)

M.Frank, N.Pourtolami and M.Toharia, "Higgs Production in General 5D Warped Models," *Phys. Rev. D* (89), 016012 (2014)

M.Frank, N.Pourtolami and M.Toharia, "Higgs Bosons in Warped Space, from the Bulk to the Brane," *Phys. Rev. D* (87), no. 9, 096003 (2013)

PEDAGOGICAL RESEARCH

The SALTISE consortium has been active in research and outreach this past year. **Liz Charles** (Photography) and **Chris Whittaker** (Physics) (with Nathaniel Lasry and Michael Dugdale from John Abbott, and Kevin Lenton from Vanier) are completing their PAREA funded project that looks at using collective conceptual networks for learning. They participated in a number of Ped Days across Québec, and gave a series of invited lectures and conference presentations. Chris Whittaker was awarded the Shifting Minds National Award from the C21 Canada organization (June 2013), the AQPC teaching award (June 2013) and the Canadian Association of Physicists teaching award (May 2013). They are organizing the 3rd annual SALTISE conference to take place at Dawson College in June 2014.

This year, Liz Charles and Chris Whittaker, along with their colleagues from John Abbott and Vanier colleges, were awarded a PAREA grant for 2014-17 on pedagogical ecosystems and novel approaches to active learning (total awarded \$418,700).

In the past year, the team has published the following papers:

Charles, E.S, Whittaker, C., Lasry, N., Dugdale, M., Lenton, K., Bhatnagar, S., Guillemette, J. (in press). Taking DALITE To the Next Level: What have we learned from a web-based peer instruction application. Proceedings of the 11th International Conference of the Learning Sciences (ICLS 2014). International Society of the Learning Sciences: Boulder, CO.

Charles, E.S., Whittaker, C., & Lasry, N. (2014). Taking DALITE To the Next Level: What have we learned from a web-based Peer Instruction application. Paper presented at 33rd annual AQPC symposium: Laval, QC.

Charles, E., Whittaker, C., & Lasry, N. (2014). Active Learning Classroom Use in College Level Physics: The impact of technology design and adaptive orchestration. Symposium entitled: Space and Technologies for Learning in Schools, Museums and Workplaces: Recent Approaches in Design-Based Research. Paper presented at the American Educational Research Association (AERA): Philadelphia, PA.

Charles, E., Lasry, N., & Whittaker, C. (2014). SALTISE: Bringing Pedagogical Innovations into the Physics Classroom. *Physics in Canada, La Physique au Canada*, 70(2).

Charles, E., Lasry, N., et Whittaker, C. (2013). L'adoption d'environnements sociotechnologiques comme moteur de changement pédagogique. *Pédagogie Collégiale*, 26 (3).

Lasry, N., Guillemette, J., & Mazur, E. (2014). Two steps forward, one step back. *Nature Physics*, 10(6).

Lasry, N., Dugdale, M. & Charles, E. (2014). Just in Time to Flip Your Classroom. *The Physics Teacher*, 52(1): 34-37.

Lasry, N., Dugdale, M. et Charles, E. (2014). Zut! J'ai renversé ma pédagogie. *Pédagogie Collégiale*, 27, hiver.

Lasry, N., Charles, E., & Whittaker, C. (2014). When teacher-centered instructors are assigned to student-centered classrooms. *Physical Review Special Topics-Physics Education Research*, 10(1), 010116.

Lasry, N., E. Charles, C Whittaker, H Dedic, S Rosenfield (2013). Changing classroom designs: Easy; Changing instructors' pedagogies: Not so easy. *AIP Conf. Proc.* (1513), AIP Press, Melville NY.

Laure Gallipeau, Catherine Soleil and Effie Konstantinopolous (AccessAbility Centre) have been integrating Universal Design for Learning (UDL) into their French as a Second Language

courses to help accommodate individual learning differences. They were awarded a three-year PAREA grant to study the « Impact des applications de la conception universelle de l'apprentissage sur le français écrit en FLS » (\$280,350 in total). In addition, they presented their work at numerous conferences in Canada.

ACCESSABILITY CENTRE

Alice Havel has been sharing her research findings on students with disabilities at the CIHR Café Scientifiques <http://www.cihr-irsc.gc.ca/e/34951.html>.

Effie Konstantinopolous is part of a PAREA-funded grant to study Universal Design for Learning in FSL classes (with Laure Gallipeau and Catherine Soleil).

CRISPESH



The Research Centre for the Educational and Professional Inclusion of Students with Disabilities (CRISPESH) is a College Centre for the Transfer of Innovative Social Practices (CCTT-PSN) born out of a partnership between the Cégep du Vieux Montréal and Dawson College. The Centre was recognized by the Ministère de l'Éducation, du Loisir et du Sport in October 2010 and is operationally funded by the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie.



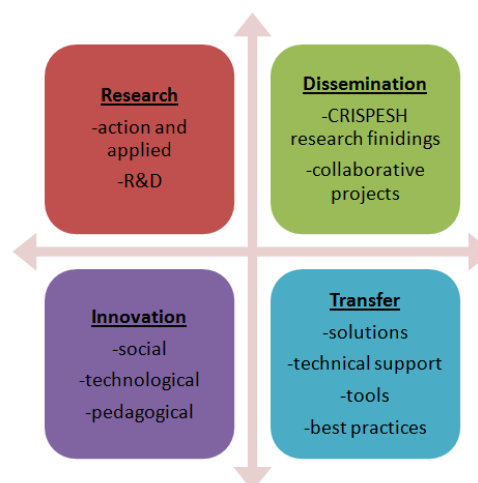
CRISPESH has for its mission the advancement of knowledge and the development and promotion of innovative social practices that target the educational, social and professional inclusion of people living with disabilities.

Our vision is to be an inclusive and synergistic hub paving the way to full inclusion of people with disabilities in all sectors of society by bringing together leaders and stakeholders in

the fields of development, research, transfer and innovation.

Research Axes (to date):

- Universal Design for Learning
- Pedagogy and educational inclusion
- Self-determination, self-advocacy, and quality of life
- Accessibility standards and norms (including web accessibility)
- Educational and assistive technology
- Visual impairment and navigation
- Ethics, privacy protection and disability disclosure
- Inclusion and accessibility in the workplace
- Internships and disability
- Disability in First Nation Communities
- Autism Spectrum Disorders and Learning
- Sign language interpretation



Services

- Applied research
- Social and pedagogical innovation
- Creation and implementation of effective tools optimizing accessibility
- Strategies facilitating academic, social and professional inclusion
- Customized training
- Popularisation and dissemination of research findings
- Community outreach

CRISPESH Research Activities 2013/2014

CRISPESH continues to evolve and grow. We are actively involved in the research community and present regularly at local, provincial, national and international scientific and popular conferences and symposia. Over the past year these include, among others, conferences organized by the *Consortium d'animation en persévérance et en réussite éducative aux études supérieures (CAPRES)*, *L'Association québécoise des troubles d'apprentissage (AQETA)*, *Carrefour de la Réussite*, *PERFORMA*, *Association francophone pour le savoir (ACFAS)* and the *Association québécoise de pédagogie collégiale (AQPC)*. We are also regularly invited to publish scientific and popular articles in journals, popular publications and have contributed chapters to books. The centre maintains strong connections with the community via community partnerships, committees, boards, etc.

CRISPESH currently holds a *Programme de collaboration universités-collèges (PCUC)* grant in partnership with Cégep du Vieux Montreal, Cégep Marie-Victorin, Collège Montmorency,

l'Université de Québec à Montréal et l'Université de Montréal. This project aims to develop pedagogical applications of Universal Design for Learning (UDL) in postsecondary education.

The Centre also holds a *Programme d'aide à la recherche et au transfert* (PART-IS) grant in partnership with AQETA, which aims to further understand the use of technological applications to improve the written French of adults with learning disabilities.

CRISPESH also holds regular public research discussion meetings, in French and English, which aim to bring together community stakeholders to discuss with an invited researcher the applied implications of the research findings. This year, the Centre organized its second annual symposium, which was on the theme of Postsecondary Pedagogy and Universal Design for Learning.

For more information, please visit us at www.crispesh.com