ANNUAL RESEARCH REPORT
2016-2017

DAWSON COLLEGE
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A Message from the Dean of Academic Development

We are thrilled to present the accomplishments of Dawson researchers and pedagogical innovators this year in this Annual Report.

We believe that research and teaching can be a syncretic process - passionate researchers involve their students in their projects and bring their passion into the classroom. Dawson is committed to supporting our researchers as they ask important questions and help to inspire the next generation of creators and innovators.

We are pleased to acknowledge support from the Research Support Fund which enables us to attract and retain talented teacher-researchers, develop extensive partnerships and collaborations, and to support student involvement in research across the college.

In 2016-17, sponsored funding for research continued to grow, with a number of new grants and exciting ongoing initiatives. These exceptional projects address a wide range of research questions in the natural and social sciences, the scholarship of teaching and learning, the field of accessibility studies, and literature and the arts. This year, we are proud to highlight projects that contribute to both knowledge creation and knowledge mobilization. For example, we have researchers examining wind patterns, how to improve First Nation student success in postsecondary education, campus sustainability, and development of free online MOOCs for improved physical activity. Our researchers participated in numerous conferences, workshops and colloquia here in Canada and around the world, sharing their discoveries and expertise with their academic peers and the general public.

I invite you to explore in this document projects that illustrate the incredible variety and significant contributions to society that our researchers and innovators make. To our faculty, thank you for your persistence and dedication to expanding knowledge in your fields; your contribution to scholarship and practice is profoundly felt by your colleagues, your students, and the whole community.

Barbara Freedman
Dean of Academic Development
Research Highlights

In spite of the climate of economic uncertainty in the areas of higher education and research, 2016-17 was a strong year for the Dawson research community, with 31 funded projects under way, supporting 26 researchers and generating over $1 million dollars in research funding. This includes nine new grants received from various federal and provincial funding agencies this past year. Dawson researchers were active in publishing and presenting their research nationally and internationally, as well as collaborating with external partners and organizations.
Dawson Research Activities
2016-2017
Alexandra Law’s work focuses on labor organizing among precarious immigrant and migrant workers in Canada and the United States. It is supported through a four-year Soutien aux équipes de recherche grant from the FRQSC. She has a co-authored journal article under review and has submitted a co-authored book manuscript, with anticipated publication later this year. Alexandra organized a presentation at the Social Science Week at Dawson on “Precarious Work by Recent Immigrants: New Graduate Research in Montreal” where two graduate student panelists from the GIREPS research group discussed their work.


Denise Brend is completing her PhD on the experiences of social workers working with trauma and professional relationships at McGill University. She received an Arts Graduate Student Travel Award from McGill University in 2017 and completed a two-year Building Research Capacity Participatory Research Training Fellowship at the Centre for Research on Children and Families, McGill University (2015-2017). She is a Disciplinary Member of the Research Ethics Board at Dawson since 2016. She has been co-chair of Interpretive Phenomenological Analysis Workgroup, a special interest group of the McGill Qualitative Health Research Group (2015-2017) and a contributor to Mile End, MTL ourstory: A collected experience of Women and LBT cultural production in the era of H2T since October 2016 on Facebook.

Publications:


Conference Presentations and Posters:


Catherine Fichten’s research has two foci: postsecondary students with disabilities and sleep and its disorders. For her research on students with disabilities, please see the section on Adaptech. Catherine’s sleep research focuses on the following areas: obstructive sleep apnea and primary care, metabolic syndrome and obstructive sleep apnea, definition and predictors of good and poor sleep quality, insomnia and diabetes, obstructive sleep apnea, sleepiness and driving safety, sleep and insomnia in first time mothers 2 and 6 months post-partum. The goal of her research is to examine referral of primary care patients for obstructive sleep apnea screening, to examine comorbidities of obstructive sleep apnea and insomnia, and to evaluate the long term consequences of treating obstructive sleep apnea on daytime functioning and metabolic syndrome components. This work is expected to result in better diagnostic practices, and more effective treatment of obstructive sleep apnea and its comorbidities.

This year, Catherine completed a four year FRQNT grant, “Mesure objective de l’attention et de la somnolence au volant” The objective of the project was a series of three studies to validate the portable NeuroSky MindWave device and algorithm to allow for its use in driving safety. The MindWave device is an inexpensive, battery-operated, and portable EEG headset. In each of the three studies, the research team found no evidence for either the reliability or the validity of the NeuroSky device or the attention, sleepiness, or eye blink algorithms. In addition, there were numerous problems with the headset (pain, headset slipped, Bluetooth connection to the computer dropped, empty intervals, etc.) The research concluded that the MindWave Device is not yet ready for use a serious measure of attention, sleepiness, or eye blink and is not ready for use in scientific studies.

Recent Refereed Publications:


Refereed Conference Presentations:


Reports and Abstracts:


Involvement of students in research

- Dorrie Rizzo – Ph.D. student, Université de Montréal
- Dieu-Ly Tran – M.A. student, Université de Montréal
- Maegan Harvison – college student, Dawson College
- Christine Vo – undergraduate, Concordia University
Anna-Liisa Aunio and her research team received a Community and College Social Innovation Fund grant from SSHRC in 2016 for their project, “Food Justice and Sustainability: Mobilizing new technologies to transform cities and build communities of change.”

Presentations:

“Justice et durabilité alimentaire: Collège Dawson,” Panel sur le rôle des campus montréalais dans l’incubation d’initiatives étudiantes novatrices en alimentation, Forum Système alimentaire montréalais, Centre de recherche du Centre Hospitalier de l’université de Montréal, Montréal, QC, October 5, 2016.

“From Food Security to Food Justice: Establishing a framework to address inequality and sustainability in urban food systems.” From Practice to Policy Seminar Series, Institute for Health and Social Policy, McGill University, Montreal, QC, October 27, 2016.

“Food Justice and Sustainability,” Beyond Disciplines: Building bridges-going beyond walls, Concordia University, Montreal, QC. December 1, 2016.

“The Community as Classroom: structuring data collection and learning beyond the walls,” Fifth Annual Winterfest, Centre for Teaching and Learning, Concordia University, Montreal, QC, January 27, 2017.


Conferences Organized:


Sustainable Campuses Forum (with Gisela Frias), Dawson College, Montreal, QC, April 26, 2017.


**Gisela Frias** and her team began their research project, “Sustainable Campuses: A North-South Research and Action Community,” in November 2016 with funding from the SSHRC Community and College Social Innovation Fund. This project is part of Dawson’s continuing institutional collaborations with Mexican partners, 3 universities and a non-governmental organization, to create and mobilize knowledge on campus sustainability across international boundaries. As part of their activities this past year, Gisela and her team carried out collaborative research, developed courses and organized forums, conferences and workshops. They have also had strong student engagement through student exchanges. Eight Dawson students from the Community Leadership and Recreational Training as well as Environmental Science and Environmental Studies participated in internships in Mexico between February 2016 and 2017. The research team also organized two forums this spring: “Itinerant Binational Forum on Sustainable Campuses” held in Mexico on March 13-15, 2017 and “Sustainable Campuses Forum Canadá-México” held at Dawson College, April 24-27, 2017. Find out more about the project at [https://www.dawsoncollege.qc.ca/sustainable-campuses](https://www.dawsoncollege.qc.ca/sustainable-campuses).

**Chris Adams** co-supervised a student thesis about Dawson’s carbon footprint by Sergio Garcia, from the Universidad Politécnica in Mexico. He presented at several conference on “Well-being for all, sustainably,” the central concept of sustainability initiatives at Dawson College. He continued to work on various projects through the Living Campus Initiative: urban ecology workshops for CTD; monarch nursery project; carbon neutral program; naturehood day camp; biodiversity zones; sustainability certificate and the sustainable happiness certificate. As part of his local outreach efforts, Chris is developing a Living Campus elementary school tour. He is working with the Quality Assurance & Planning Office, Plant & Facilities and the Sustainability Steering Committee to develop a sustainability master plan for the college to seek accreditation by an external organization.
Ian Alexander Cuthbertson is a Flora Jane Postdoctoral Fellow and Adjunct Assistant Professor at Queen’s University (Ontario) and an instructor in the Humanities department at Dawson.

Publications:


Conference Presentations:


Conferences Organized:


Organizer of Unravelling Religion 3: Space, Place, and Affect. Interdisciplinary Graduate
Kester Dyer is a part-time faculty member in Humanities and currently completing a PhD in Film and Moving Image Studies at the Mel Hoppenheim School of Cinema, Concordia University. His dissertation, funded by FQRSC and SSHRC, examines expressions of intercultural tension through manifestations of the supernatural in Québec cinema. He received the Film Studies Association of Canada (FSAC) Student Writing Award for 2016.

Publications:


Conference Presentations:


“Recasting Québec/France as Intercontinental Haunting: Jean-Marc Vallée’s Café de Flore,” Society for Cinema and Media Studies (SCMS), Atlanta, 30 March 2016.

Workshops organized:


Short Film Produced by Workshop Participants: [http://www.wapikoni.ca/movies/co-wreck-the-record](http://www.wapikoni.ca/movies/co-wreck-the-record)


Kristopher Woofter completed his PhD in Film and Moving Image Studies from Concordia University in June 2017. His research includes the horror genre, the Gothic, folk and fairy tales, documentary, mockumentary, pseudo-documentary and new media. He is a peer reviewer for *Horror Studies* and Associate Editor of *Slayage: The Journal of Whedon Studies*. He is co-director, curriculum coordinator and lecturer for the Miskatonic Institute of Horror Studies, Montreal, Associate Editor and Co-chair of Horror Area of the Popular Culture Association / American Culture Association, and a member of Editorial Board of *Watcher Junior: The Undergraduate Journal of Whedon Studies*. He is also a film programmer for the Montreal Underground Film Festival.
Lectures and Refereed Conference Presentations:


John Hunting completed his four year project, “ARTHEMIS: histoire, épistémologie et culture des études sur le cinéma et l’image en mouvement” funded by the FRQSC programme, Soutien aux équipes de recherche (PI : Martin Lefebvre, Concordia University). John uses a Levinasian approach to the photographic, exploring the ethics of visual communication. His research addresses ethics, aesthetics, photographic arts and media studies.

Nadia Khouri is interested in philosophy and happiness, and is working on a treatment of the topic from Plato to the World Happiness Report. She is continuing to teach Philosophy and Ethics in Films and has participated in the annual Humanities and Public life conferences at Dawson for the past few years. She interviewed human rights lawyer, Julius Grey, and plans to interview former MNA Fatima Houda Pepin at the next Humanities and Public Life Conference in September 2017. She has made video compilations of animation clips on philosophy and ethics.

Jiri Tucker spent time in the eastern United States on his professional development leave in 2015-2016, investigating the connections between classics (the Greco-Roman world) and the extensive museum collections in New York, Philadelphia, Baltimore and Washington DC. He met with museum educators, docents, restorers and administrators to consider different approaches to education and to understand better how to use museums as learning institutions for college students. He also gave lectures on classics at local American high schools, and met with teachers and administrators to discuss classics as part of the curriculum, gaining valuable insight into the continued importance of classics as a pedagogical tool.

Michael Wood presented in September 2016 at Dawson's Humanities and Public Life Conference. His presentation was titled, "Nation Branding as Reflected in UNESCO World Heritage Sites in the Balkans." It examined a series of sites in Montenegro, Croatia and Bosnia-Hercegovina that are either on or have been proposed for the UNESCO World Heritage list. For each of these countries, the selection of a site involves the propagation of a distinct national brand that promoted their cultural, economic and even political interests. This presentation was the result of research conducted in the region in the summer of 2016, partially funded by the Dawson College Professional Development Fund. This research built on previous work
conducted in the region in the summer of 2014 and reflected a long-standing research interest in
the use and misuse of historical themes and symbols for purposes of nation building, regime
legitimization and national branding in Egypt, Indonesia and the Balkans.

**Julian Nemeth and Jean Coléno** organized the annual Dawson College Humanities and Public
Life Conference, September 19-23, 2016, which had the theme of “Thinking about Identity.” The
conference had 25 sessions attended by 3500 people.

The conference included many engaging presenters. Among them were Taiaiake Alfred from the University of Victoria, arguably the world’s
leading expert on indigenous governance, Michel Seymour, one of Quebec’s most distinguished political scientists, Heather Igloliorte, one
of Canada’s foremost experts on Inuit art, and Stevan Harnad, the 2001-
2015 Canada Research Chair in Cognitive Science. The conference also
included a special session devoted to the *It Happens Here* initiative,
which documents the stories of sexual assault survivors.

**Janice Harvey** is a member of a FRQSC funded research team that studies questions of poverty
and vulnerability in nineteenth and twentieth century Montreal. This year she pursued her
research on the Boys’ Home of Montreal, presenting a paper in the fall, “Training Citizens: The
unusual approach of the Boys’ Home of Montreal, (1871-1908)” that was subsequently
submitted for publication. She also corrected and updated the English translation of a chapter she
co-wrote with the late Jean-Marie Fecteau, “Montreal’s Network of Social Regulation,” to be
published in the upcoming *History of Montreal and its Regions* by McGill-Queens University
Press. Palgrave Macmillan has accepted to publish a book on the history of youth and justice, in
which she is the author of a chapter on the Ladies’ Benevolent Society Industrial School. She is
beginning research on the Sherbrooke Reform School for a conference presentation in the fall
and continuing work on a manuscript. Over the course of the year, she worked with six students
on various projects, including building a new database.

**Elizabeth Kirkland** completed a four year research project “Modernité et légitimité à Montreal,
1800-2010” funded by the FRQSC programme, Soutien aux équipes de recherche (PI: Rudy
Jarrett, McGill University). She looked at the ways women in the pre-suffrage era created
political and activist links that crossed the Atlantic. In particular, the years during the Great War
provided many opportunities for Montreal women to build transnational networks that embodied
their nationalist, imperialist, and maternalist activism. For example, Lady Julia Drummond
established a massive coordinated effort to connect Canadian soldiers on the front to their family
back in Canada through an Information Bureau that worked under the auspices of the Red Cross.
The IB’s reach went far beyond anything Drummond initially envisioned and was in perpetual
coordination with the Canadian Government, the War offices, and the International Red Cross as
it became the central communication hub for Canadian Soldiers taken as Prisoners of War by the
Germans. This one example demonstrates the way women were entangled in complex
transatlantic political action before most women in Canada (or Great Britain) had the right to
vote. Similar trans-Atlantic co-ordination efforts were explored connecting Montreal to Paris as
well.
Natalie Olanick curated an exhibition of multi-media artist Penelope Stewart’s work, *Cleave …a walk in the wilderness*, at the Warren G. Flowers gallery at Dawson College, from February 18 to March 12, 2016. She wrote the essay for the catalogue, *Penelope Stewart: Projects*. Stewart carried out a yearlong project at Dawson, which comprised a solo exhibition, a portfolio of prints with Dawson students and faculty and an outdoor installation in the Peace Garden. Find more about the exhibition here: https://www.dawsoncollege.qc.ca/art-gallery/past-exhibitions/cleave-a-path-in-the-wilderness-by-penelope-stewart/

Beverly Sing exhibited her Japanese brush calligraphy artwork at several exhibitions.

Japanese Calligraphy scroll with a haiku poem (Plums in May) submitted to the 45th Exhibition of the International Calligraphers Association in Tokyo, March 2017. It was awarded a Jury Prize (International Division) and exhibited at the Tokyo Metropolitan Museum, March 1-8, 2017.

Japanese Calligraphy scroll with two summer poems from the Wakan Roei Shu submitted to the 9th Annual Japanese Calligraphy Competition in Toronto, Canada, November 2016. It was awarded a Gold Prize and exhibited at the Japanese-Canadian Cultural Centre in Toronto, November 5-12, 2016.

PHOTOGRAPHY

Kate Hutchinson’s book, *The Park* (Editions du Renaud, 2015), which is a collection of images taken on Mount Royal, received more publicity in the past year. Images from *The Park* were exhibited in Toronto at Album Gallery from April 1st - June 1st 2016.


**ENGLISH LITERATURE AND LITERARY CRITICISM**

**Stewart Cooke** is completing his three year research project on the letters and writings of English novelist, diarist and playwright Frances Burney and her family, funded by a SSHRC Insight Grant.

**Presentations:**

“‘Received Melodies’: The New, Old Novel.” Session: "History/Fiction/Film." Authorship and Appropriation Conference, University of Dundee, 2016.


**Sarah Burgoyne’s** poetry collection, *Saint Twin* (Mansfield Press, 2016) was nominated for the A.M. Klein Prize in Poetry. She also received a Canada Council of the Arts Grant for her second manuscript, tentatively titled *I the Sun*.

**Marie Thérèse Blanc** published two articles, along with her own photographs.


**David Gelineau** has two publications:


**Joseph Rosen’s** two previously published articles, “The Israel Taboo” and “The Third Solitude,” were nominated for Best Essay in the National Magazine Awards of 2014 and 2015, respectively. He also participated in various literary events in the past year.


**Public speaking:**

Host, roundtable on “God, Society, Literature” with Amir Or, Ariela Freedman, Josip Novakovich & Gorazd Kocijancic at Blue Metropolis, April 28, 2017.
In conversation with Ayelet Tsabari. Blue Metropolis, 17 April 2016.

Sabine Sautter-Léger's research areas include modernist and contemporary literature.


FRENCH LITERATURE

Djemaa Maazouzi’s field of study is French–language literature of the 20th and 21st centuries and her research focuses on colonial and independence-era literature in both the colonies and the home country. Her work takes its methodology from both literary sociocriticism and intermedial studies and questions the links between history, politics and literature.

Publications:


Conference presentations:


Véronique Millet has studied French language and literature as well as art history. Her research focuses on the work of Marcelle Ferron and the notion of transparency. She participated in an international colloquium in Morocco and presented on self-portraits in photography in the work of French-Canadian artist, Françoise Belu.

Presentation:

« Le reflet : ou comment se dévoile l’intime de l’artiste et du regardeur »
« Le portrait dans la littérature et les arts visuels », organized by the Faculté des lettres et des sciences humaines, Université Ibn Zohr, Agadir (Maroc), 15-17 mars 2017.

Photo by Françoise Belu

Richard Fournier’s research in mathematical analysis is funded through two ongoing grants: an FRQNT Programme de recherche pour les enseignants de collège for the project “Quelques problèmes d’analyse complexe” and an FRQNT Soutien aux équipes grant through his affiliation at the Centre de Recherches Mathématique at Université de Montréal. Richard is also an adjunct professor in the Mathematics Department of Université de Montréal. He is involved in the training of Dawson students for mathematics competitions and the now traditional yearly Dawson mathematics competition. He submitted in 2016 two papers written jointly with Dawson students to the Dawson Research Journal of Experimental Sciences. In 2016, Richard was a peer reviewer for 10 papers from various journals, such as *Mathematical Reports of the Canadian Academy of Sciences*, *Turkish Journal of Mathematics*, *Journal of Integral Transforms*, *Computational Methods and Function Theory*, *Annales des Sciences Mathématiques du Québec*, *Proceedings of the American Mathematical Society*, *Analysis Mathematica*, and *Applied Mathematics*. Richard collaborated this year with international colleagues: Richard Grenier from Germany who also gave a talk in the Math department at Dawson and in the winter of 2016, Catherine Béneteau and Dima Khavinson from the University of South Florida.

Publications:


Conference Presentations and Talks:


“On various proofs of Jack’s lemma.” Congressio Mathematica, University of Warmia in Olsztyn, Poland, September 2016.


**Benjamin Seamone** is completing his research project, “A study on path and cycle based properties of graphs” funded by FRQNT’s Programme de recherche pour les enseignants de collège. Ben co-supervised a student from Université de Montréal this year. He also worked with two Dawson students in his research, Aaron Krim-Yee and Alexander Hassler. Alexander was awarded a $5,000 bourse de stages d'été pour les étudiants de niveau collégial from FRQNT in summer 2016 to work with Ben on “Active cops and robbers with fixed capture points.” Ben also co-organized the Association mathématique du Québec Summer Camp at Dawson College. As part of his academic service, he reviewed articles for the American Mathematical Society's *Mathematical Reviews* database. Ben is a member of the Centre de Recherches Mathématique at Université de Montréal.

Conference Presentations:

“Edge clique covers in graphs with independence number 2,” 4th Bordeaux Graph Workshop, Université de Bordeaux, France.


“Fully active cops and robbers,” 5th Graph Searching in Canada Workshop, Dalhousie University.

Workshops and Conferences Attended:

13th Workshop on Algorithms and Models for the Web Graph, Centre de recherches mathématiques, Montréal.
Kengatharam Thirulogasanthar is continuing his research project, “Coherent states, frames, wavelets and orthogonal polynomials on quaternion Hilbert spaces,” funded through the FRQNT Programme de recherche pour les enseignants de collège. He received a grant of Euro £2500 from the National Group for Algebraic and Geometric Structures and their Applications of Italy (GNSAGA-INdAM) to support his research collaboration at Politecnico di Milano, Italy from March 2017-June 2017. He is currently supervising an M. Phil student at the University of Jaffna, Sri Lanka, and is also supervising two Dawson students and their projects. One M.Phil student under his co-supervision at U of Jaffna recently completed his thesis.

Publications:


Submitted articles:


Conference Presentations:

K. Thirulogasanthar (Joint work with B. Muraleetharan), Coherent state quantization and the Heisenberg uncertainty principle in the quaternionic setting, Coherent states and their applications: A contemporary panorama, CIRM, Marseille, France, November 14-18, 2016.

Research Collaborative Visits:


Visiting Scholar, Research collaboration with Prof. Irene Sabadini. Department of Mathematics, Politecnico di Milano, Italy, March 2017-June 2017.

CHEMISTRY

Yann Brouillette continued the theme of his previous years’ presentations at the 43rd annual College Chemistry Canada (C3) conference in Saskatoon, Saskatchewan, from June 9th - 11th 2016. His presentation, titled “Comic Book Chemistry Part Six: Extracting Super,” focused on chemical evidence used to analyze certain super powers, innovative armors and marvelous abilities described in comic book universes.

PHYSICS

Jonathon Sumner completed his FRQNT funded research project this year, titled “Simulation des écoulements atmosphériques dans un parc éolien afin d’évaluer sa performance et maximiser son rendement.” The goal of his research is to improve wind flow modelling to decrease the financial risk associated with wind energy development. Currently, the primary challenges for modelling the wind near the earth’s surface are accounting for the effects of temperature and forested regions. He proposed a new turbulence model that is capable of exactly reproducing temperature effects for idealized cases and will be testing its conceptualization through a new collaboration with the University Tecnológico de Monterrey. He also completed an applied research project with Frontier Power Systems to develop efficient wind turbines. Jon offered a summer internship to a graduating Science student from Dawson who completed a project on elliptical mesh generation. He supervised a Master’s student at ETS who will defend her thesis this summer. She will also submit a co-authored paper to the American Society of Mechanical Engineers in the coming weeks on “Evaluating the accuracy of RANS wind flow modeling and its impact on capacity factor for moderately complex forested terrain.”

Publications:

Submitted article:

J. Sumner, “A seamless formulation of the k-ε turbulence model for simulation of the thermally stratified atmospheric surface layer” Submitted to Boundary-Layer Meteorology.

Invited Presentation:


Manuel Toharia Zapata continued working on his research project, “Higgs phenomenology in warped extra dimensions,” supported through the FRQNT Programme de recherche pour les enseignants de collège. He formed the Dawson High Energy Particle Physics group in June 2016 to involve students in particle physics research, (https://mtzhep.wordpress.com/). In summer 2016, he mentored two summer interns, Jon Boretsky and Sam Fisher and they submitted a co-authored article together to the Dawson Research Journal of Experimental Science (DrJes) in September 2016. Manuel is also a peer reviewer for the American Physics Society journals, Physical Review D (particles and fields) and Physical Review Letters.

Publications:


Articles submitted for peer review:


Presentations:

"Precision Higgs measurements and extra dimensions at the LHC". Colloquium presented at the Physics Department, Concordia University, September 30, 2016.

Student articles:

GEOLOGY

Richard Soare works on planetary geology, using high-resolution satellite imagery to determine the effect of ice and water on the Martian landscape. He is the Mars ground-ice specialist on an eight-member Canadian science-team funded by the Canadian Space Agency to study the feasibility of this mapping mission. The Mars 2022 Orbiter is a proposed NASA Mars communication satellite set to fly in 2022. One of its main aims is to map the possible presence of sub-surface ice by means of a high-resolution (and Canadian-built) ground-penetrating radar.

Publications:


Refereed conference presentations:


Conference Abstracts:


**COMPUTER SCIENCE**

Maja Frydrychowicz has contributed open source software to Mozilla. In particular, she has worked on parts of the W3C WebDriver standard, which defines a cross-browser, cross-platform protocol for browser automation. She has also contributed to Mozilla's continuous integration
infrastructure to reduce build times and improve the accuracy of test results. Her code contributions for 2016-2017 are itemized in search queries on Mozilla's issue tracker, Bugzilla, as well as on Github, which also shows contributions to related projects such as WebDriver and Web Platform Tests.

**HEALTH SCIENCES**

**Hélène Nadeau** received a two-year FRQS grant in 2016 from the Programme d’appui à la recherche pour les enseignants-chercheurs de collèges for the project: « Étude comparative des circuits neuronaux entre aveugles précoces, aveugles tardifs et voyants à l’aide d’IRM de structure et de diffusion ». She is working in the group of Dr. Franco Lepore, in the Department of Psychology at the Université de Montréal.

She has been coordinating the Brain Imaging Research Group. In the summer of 2016, 24 students participated in a Group Internship. They met twice a week as a large group for the whole summer. In addition, they participated in pairs in research projects led by partners from McGill University, the Université de Montréal and the Douglas Mental Health Institute, or designed their own projects at Dawson under faculty supervision. They gave multiple presentations for the group: two presentations in Psychology classes, a First Choice Science seminar, a week-long poster session for the Dawson community, participated in Open House, wrote DrJes papers, produced several CE projects, gave a poster at ACFAS 2017, and will present posters at Science Fest. She worked with three students on research projects during the school year.

She collaborated with Dawson faculty Maria Dikeakos (Physics) and Silvia d’Apollonia (Biology, emerita) to introduce the internship to colleagues from different departments at Ped Day 2016. Lastly, she was a member of the selection committee for the FRQS Programme d’appui à la recherche pour les enseignants-chercheurs de collèges in March 2017.

Conference presentations:

In May 2016, she gave an oral presentation: “Dynamique d’un groupe de cégépiens expérimentant la recherche multidisciplinaire” in the colloquium: “Performances, défis et questionnements sur l’intégration des étudiants dans la recherche au collégial”, Congrès de l’ACFAS 2016. As a follow-up, she and a few participants from the colloquium extended their reflection to a broader Canadian community and led a workshop at the CICan 2017 Conference on the integration of college students in research projects on May 1st, 2017 in Ottawa. She is also planning to give an oral presentation at the Saltise 2017 conference on a related topic.

**PHYSIOTHERAPY**

**Sharon Clegg** has been working with the Tekphy team on a project titled "Technologies intelligentes en kinésiologie et en techniques de réadaptation physique." It is a collaboration between the department of Kinesiology at Université de Montréal and the Physiotherapy programs at Cégep Marie-Victorin and Dawson College. In the past year, the team has created
software for the Wii Balance Board and the Kinect sensor to provide assessment tools and games. These provide health professionals and trainers with an objective measure of a client's balance and fitness level.

In order to disseminate the knowledge and software for free to the public, the team created and filmed scenarios and content for their MOOCs (Massive Open Online Courses) hosted by the Edulib platform at Université de Montréal. They have also created assessment tools (quizzes and test questions) so the MOOC can serve as Continuing Education for a variety of professions such as physiotherapists, physiotherapy technologists, kinesiologists, athletic therapists, and occupational therapists. The Tekphy team also presented a Webinar on the use of gaming technology in rehabilitation services on March 22, 2017. Dawson students have benefited from the opportunity to get hands-on experience working in the field each semester through internships with the Tekphy team.

Vanessa Gangai received a grant from the McGill Training and Retention of Health Professional Project and completed the project, “On the Move: Increasing Physio services to St. Anne’s Hospital.”
Elizabeth Charles and her colleagues continued working on two projects this year, one funded by SSHRC (CCSIF), and the other funded by PAREA. The SSHRC project is “Leveraging new paradigms and disruptive technologies to successfully orchestrate pedagogical change” and includes as co-applicants: Rob Cassidy (formerly of Dawson), Nathaniel Lasry (John Abbott), Kevin Lenton (Vanier), Bruno Poellhuber (UdM), and James D. Slotta (UofT, OISE).

She and her team also completed the last year of their PAREA-funded project on active learning classrooms, “Ecosystème Pédagogique et Artéfacts Épistémiques.” Globally, this project looked at how students learn in active learning (AL) classrooms as it relates to their engagement in instructional activities. Specifically, they define this engagement as the activity leading to the production of knowledge objects, what they consider as epistemic artifacts. The results of these case studies show that AL classroom design can have an impact on the level of student engagement. In particular, the technologies used for the shared writable surfaces can impact the quantity of students who actively contribute and the quality of their engagement. In rooms with digital interactive whiteboards, more students engage with the artifact than in analog whiteboards.

Liz and her colleagues, Chris Whittaker (Physics), Nathaniel Lasry and Michael Dugdale from John Abbott and Kevin Lenton from Vanier, as well as other collaborators from English and French educational institutions continued their work in Supporting Active Learning and Technological Innovation in Studies of Education (SALTISE) consortium, including organizing their annual conference. SALTISE is a community of practice centered on ideas of pedagogical change involving innovations in instruction and leveraging the use of educational technology to promote learning.

Grants Awarded 2017:

SSHRC Connection Grant, “Fostering a knowledge community: co-constructing and leveraging a digital platform for STEM education.” PI: Alain Breuleux, Co-Applicants: Elizabeth S. Charles and Rob Cassidy.

Publications:


Conferences organized:

SALTISE Conference 2016 & 2017

Conference presentations:


Workshops:


Laure Galipeau, Catherine Soleil (French) and Effie Konstantinopoulos (SAAC) are continuing their PAREA-funded project to study the effects of Universal Design for Learning (UDL) concepts on students in French as a second language courses. The preliminary results will be presented at the annual conference of l’Association Québécoise de Pedagogie Collégiale, (AQPC) in Montreal in June 2017. The final report on their research will be available in
December 2017. Since winter 2016, the team has also been invited to present workshops on their research on pedagogical application of UDL model by a number of colleges in the network.

Presentations:

Catherine Soleil, Laure Galipeau, Effie Konstantinopoulos, UDL@Dawson, « De l'intégration à l'inclusion », Cégep de Victoriaville, Victoriaville, 28 avril 2017.

Laure Galipeau, Catherine Soleil, accompagnement pédagogique d'un groupe de professeurs d'anglais langue seconde, rencontres virtuelles par Skype, Cégep de Victoriaville, Montréal, 3 et 17 février 2017.


Catherine Soleil, Laure Galipeau, Effie Konstantinopoulos, Guest Speakers, "Teaching Nowadays" Collège Champlain St-Lawrence, Québec, 21 avril 2016.


**Susan Briscoe and Michelle Smith**

Susan Briscoe, Michelle Smith and their team received a Community and College Social Innovation Fund grant from SSHRC in 2016. Developed and led by English Faculty and First Peoples Initiative Steering Committee Member Susan Briscoe, their three-year project aims to advance a new conversation about postsecondary educational opportunities for First Peoples in Quebec. It takes a community-based participatory research approach to investigate the complex interplay of family, community, and postsecondary institutions on student access to, and success, in postsecondary education. Through storytelling exchanges, participants contribute to the creation of more responsive programs and services for Indigenous students at the post-secondary level. In the past year, the research team has set up Community Advisory Boards with several indigenous communities in Quebec and organized several Talking Circles with research.
participants. Three members of the research team and a Concordia student will be presenting their research at the World Indigenous Peoples Conference on Education (WIPCE) in Toronto from July 24 – 28, 2017. Unfortunately, due to terminal illness, Susan had to step down as Project Director at the end of the academic year, and Michelle Smith has taken up the position. The research team is grateful for Susan’s foresight and commitment to Indigenous education. Without her dedication, energy and leadership, this project could not have begun.

Tanya Chichekian received two grants from SSHRC in 2016, a Postdoctoral Fellowship (2016-2018) in the Positive Psychology of Education, held in the Research Laboratory on Social Behavior at UQAM, and Insight Development Grant (2016-2018), titled “Challenges associated with the academic success of Aboriginal students in postsecondary education.”

Publications:


Sameer Bhatnagar continued work on the PAREA-funded project, “Persévérance et réussite scolaire par le forage de données d’éducation” with co-applicant Nathaniel Lasry from John Abbott College. Their project uses Big Data to assess student success and to identify students at risk.

Carlo Catino and James Roberts, both teachers in the Department of Economics, developed original software in the winter 2017 semester to help students at risk and students with disabilities to achieve better competencies in Quantitative Methods. The software is based on universal design and involves a variety of interactive tests and activities.

Ian Duncan Mackenzie co-authored a paper on Writing Across Disciplines with colleagues, which was presented at a conference.

Co-author, with Susanmarie Harrington and Dan DeSanto of the University of Vermont, of "Traversing Uncommon Ground: Cases in WID Consulting," delivered at the International Writing Across the Curriculum Conference at the University of Michigan in Ann Arbor in June 2016.
ADAPTECH RESEARCH NETWORK
(For Catherine Fichten’s research on sleep disorders, please see the Psychology section.)

The Adaptech Research Network consists of a team of academics, students and consumers co-directed by Catherine Fichten (Psychology, Dawson) and Jennison Asuncion. They conduct research involving college and university students with diverse disabilities (e.g. visual, mobility, hearing impairments, psychological, learning and chronic medical disabilities). Their areas of focus are: use and accessibility of information and communication technologies in postsecondary education, facilitators and barriers to academic success, and free or inexpensive software useful to students with various disabilities. The goal is to provide empirically based information to assist and inform decision making that ensures that new policies and new information and communication technologies reflect the needs and concerns of a variety of stakeholders. The outcomes will be better educational opportunities and learning experiences for college and university students with disabilities.

The team has just completed a three year FRQSC grant on information and communication technologies (student perspectives versus exemplary-teacher practices) as well as a major update of their Free and Inexpensive Adaptive Technology Database, which now includes Windows 10, Apple and Android built-in features and apps. They currently hold an international network grant on disabilities, information and communication technologies, and postsecondary education (ED-ICT: Disabled Students, ICT, Post-Compulsory Education & Employment: In Search of New Solutions), and they will be hosting an international conference at Dawson College, in collaboration with Cégep André-Laurendeau in May 2017. Key issues to address include stakeholder perspectives. In addition, they continue to present and publish on their findings. The Adaptech team participated in 9 talks, interviews and invited addresses this year, in addition to conference presentations.

Grants held in 2016-2017:

SSHRC Connection Grant, 2017
New perspectives: Role of stakeholder groups in ensuring accessibility of ICTS to postsecondary students with disabilities
Awarded to Fichten, C., King, L., & Havel, A. in collaboration with Seale, J., Fisseler, B., Heiman, T., & Burgstahler, S.

Dawson College, 2017
Support Academic Success of Students With Particular Needs, Including Students With Disabilities (S024)
The myth and reality of PowerPoint notes online
Awarded to C. Fichten

The Leverhulme Trust International Network Grant, 2016-2019
Disabled students, ICT, post-compulsory education & employment: in search of new solutions
Awarded to Seale, J., Fichten, C., Heiman, T., Fissler, B., & Burgstahelr, S.

Centre for the Study of Learning and Performance (CSP, 2016-2017
Integrating Language Learning Within and Beyond the Classroom Walls
Awarded to Collins, L., Waddington, D., King, L., & Cardoso, W.

Service Canada, 2016
Labour Market and Social Development Program
Awarded to Fichten, C.S.

Provincial Interlevel Table for the English Sector (TPSA), 2015-2016
Adaptech Research Network’s Free and/or Inexpensive Assistive Technology Database
Awarded to Fichten, C.

Fonds de recherche du Québec - Société et culture (FRQSC) et le ministère de l’Éducation, du
Loisir et du Sport (MELS), 2014--2020
Centre d'études sur l'apprentissage et la performance (CEAP)

Fonds de recherche du Québec - Société et culture (FRQSC) et le ministère de l’Éducation, du
Loisir et du Sport (MELS), 2013-2017
Les perspectives des étudiants et des professeurs sur l’excellence dans l’utilisation des TIC et du
cyberapprentissage au collégial
Awarded to Fichten, C., King, L., Amsel, R., & Vaikla-Poldma, T. and collaborators Asuncion,
J., Cassidy, R., Havel, A., Heiman, T., Hewlett, M., Jorgensen, S., Moon, R., Raymond, O.,
Scapin, R., Sparks, J., Thomson, R., Tremblay, M., Wileman, S.

Fonds de recherche du Québec – Nature et technologies (FRQ-NT), 2013-2016
Volet B - Projet de recherche, Mesure objective de l’attention et de la somnolence au Volant
Awarded to Fichten, C.S.

Honours/Prizes

Catherine Fichten: Association francophone pour le savoir- ACFAS 2016, Prix Denise-Barbeau

Evelyne Marcil: Association pour la recherche au collégial – ARC, Prize for best title for a poster, 2016

Laura King: Association québécoise de pédagogie collégiale – AQPC, Mention d’honneur de l'Association québécoise de pédagogie collégiale, 2016
Cégep André-Laurendeau, Staff Recognition Award, 2016

Catherine Fichten: Appointed to the Advisory Board of the National Center for College Students with Disabilities (NCCSD) at AHEAD in the United States, 2016-2017
Publications:


Refereed Conference Presentations:


without learning disabilities/attention deficit hyperactivity disorder in Canada and Israel.”
Presentation at ICAP 2016: 18th International Conference on Applied Psychology, Tokyo, Japan, May 2016.

Popular Press Articles:


CRISPESH

The Research Centre for the Educational and Professional Inclusion of Students with Disabilities (CRISPESH) is a College Technology Transfer Centre in 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 Ministry of Education, Recreation and Sports (MELS) in October 2010 and is operationally funded by the Ministère de l’Enseignement supérieur, de la Recherche et de la Science and the Ministère de l’Economie, de l’Innovation et des Exportations. CRISPESH’s research revolves around 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.

CRISPESH offers targeted training opportunities and consultation services to support organizations, businesses and educational institutions with the professional and academic inclusion of people with disabilities. They publish research results in widely disseminated journals and reviews, and present at scientific conferences and events for the public. CRISPESH works in partnership with a number of organizations, including: McGill University, UQAM, Université de Montréal, Concordia University, Collège Montmorency, Cégep Marie Victorin, l’Office des personnes handicapées du Québec, ADAPTECH, CAMO, Autisme et troubles envahissants du développement Montréal, Centre Abe Gold, École à Pas Géant, Association Québécoise pour la réadaptation psychosociale, English Montreal School Board, Association Québécoise interuniversitaire des conseillers aux étudiants en situation d’handicap, Action main-d’œuvre, Association Québécoise des étudiants ayant des incapacités au post-secondaire.

The CRISPESH team has completed or is completing the following projects in 2016-2017:

Formation par simulation en santé mentale
Programme : Passeport Innovation
Organisme subventionnaire : Ministère de l’Économie, de la Science et de l’Innovation
Partenaire(s) : Hébergement communautaire Ungava (HCU)
Objectif : Développer un prototype de formation par simulation en santé mentale offert sur support multimédia pour les intervenants d’une ressource communautaire oeuvrant en région éloignée au sein d’une communauté inuit.
La photographie comme moyen d'expression, de participation sociale, d'autodétermination et d'inclusion des étudiants en situation de handicap au collégial
Organisme subventionnaire : Office des personnes handicapées du Québec (OPHQ)
Objectif : Favoriser la participation sociale des étudiants en situation de handicap du collégial en utilisant la photographie comme moyen d’expression de leur perspective sur leur expérience au sein de la communauté des cégeps.

Soutien à l’intégration des étudiants en situation de handicap : développement d’un instrument d’évaluation des besoins de l’apprenant
Programme : Programme d’aide à la recherche et au transfert – Volet sociale
Organisme subventionnaire : Ministère de l’Éducation et de l’enseignement supérieur
Partenaire(s) : CIMMI
Objectif : Développer un instrument d’évaluation à l’intention des intervenants des services adaptés pour soutenir les étudiants en situation de handicap dans leur réussite éducative.

Soutenir l’employeur dans l’inclusion professionnelle des personnes vivant avec une déficience intellectuelle ou un trouble du spectre de l’autisme
Programme : Programme d’aide à la recherche et au transfert – Volet sociale
Organisme subventionnaire : Ministère de l’Éducation et de l’enseignement supérieur
Partenaire(s) : Centre intégré de santé et de services sociaux de la Montérégie-Ouest (CISISSMO)
Objectif : Développer de bonnes pratiques de préparation et de soutien aux employeurs vers une gestion plus inclusive des personnes vivant avec une DI ou un TSA dans les milieux de travail.

Améliorer les conditions de sommeil de l’enfant vivant avec un trouble du spectre de l’autisme grâce à un design réfléchi et personnalisé de sa chambre
Programme : Programme d’aide à la recherche et au transfert – Volet sociale
Organisme subventionnaire : Ministère de l’Éducation et de l’enseignement supérieur
Objectif : développer un cadre général, adaptable aux besoins individuels, d’aménagement de chambre pour enfants (2 à 12 ans) vivant avec un TSA qui se base sur les perceptions sensorielles.

Ongoing project:

Ongoing project:

Incubateur d'entreprises inclusif destiné aux autochtones
Programme : Fonds d’innovation sociale destiné aux communautés et aux collèges
Organisme subventionnaire : Conseil de recherches en sciences humaines du Canada
Partenaire(s) : Collège Dawson, Cégep du Vieux Montréal, Conseil scolaire des premières Nations en éducation aux adultes (CSPNEA), Commission de développement des ressources humaines des premières Nations du Québec (CDRHPNQ), Commission de développement économique des Premières Nations du Québec et du Labrador (CDEPNQL), Tewatonhnhisaktha, Fondation Martin.
Objectif : Développer un modèle d’incubateur d’entreprises adapté à la fois aux besoins variés et aux réalités autochtones.
The following project is newly funded in 2016-2017:

Formation aux gestionnaires – Gestion de la diversité – Inclusion des personnes en situation de handicap
Organisme subventionnaire : Emploi Québec
Partenaire(s) : Conseil du patronat du Québec (CPQ) et Regroupement des organismes spécialisés pour l’emploi des personnes handicapées (ROSEPH)
Objectif : Accompagner et outiller les entreprises dans la gestion de la diversité, en s’intéressant particulièrement aux personnes en situation de handicap.
Office of Academic Development

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