

ANNUAL REPORT

Department of Electrical and Computer Engineering

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Submitted by:

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Interim Chair**

EXECUTIVE SUMMARY

2011 was a year of many events for the Department of Electrical and Computer Engineering (ECE), which saw changes in leadership, the arrival of several new hires and the retirement of several senior professors, as well as the tragic passing of one of our faculty members. Throughout the year, the department has however maintained its tradition of excellence, in all areas of teaching, research and service, as described in detail in this report.

RESEARCH AND PUBLICATIONS

In 2011, ECE members published a combined total of 134 refereed journal papers and 274 refereed conference papers, for an impressive average production of 9.2 papers per tenured or tenure track professor per year. It must be noted that, in several sub-disciplines of Electrical and Computer Engineering, conference publications are a privileged means of fast dissemination, and are sometimes as well regarded as journal publications.

Most of those publications are done in collaboration with supervised graduate students, and professors in ECE maintain a level of funding that allows them to provide adequate funding to a research team that is large by any standards (on average, each tenured or tenure track professor supervises 7.8 graduate students).

The levels of competitive funding attracted by ECE professors are quite significant, and, in 2011, reached an overall level of more than \$10M (see detailed breakdown in table below). In 2011, ECE professors have brought in a very healthy average of around \$180,000 in operating funding and \$55,000 in infrastructure funding per faculty member.

SOURCE:	Operating grants	Infrastructure grants	Grand Total
CFI	\$ 25,917.51	\$ 1,980,147.97	\$ 2,006,065.48
FRQNT	\$ 775,407.12	\$ 21,111.92	\$ 796,519.04
NSERC	\$ 4,965,883.66	\$ 241,016.33	\$ 5,206,899.99
Other	\$ 2,142,120.37	\$ 160,879.47	\$ 2,302,999.84
Grand Total	\$ 7,909,328.66	\$ 2,403,155.69	\$ 10,312,484.36

Thanks to its many ties to industry (with for instance 4 active NSERC Industrial Research Chairs), research in ECE delivers results that are industrially pertinent, and can be applied to different areas of human activity: as an example, several researchers have delivered in 2011 results in the healthcare application area, from low complexity biocompatible sensors to electroencephalography signal processing techniques.

TEACHING AND LEARNING

GRADUATE PROGRAMS

ECE has very strong graduate programs. ECE's graduate student population is made up of 334 individuals, of which 217 are enrolled in the department's PhD program. The department faculty is research intensive, with an average of 4.9 PhD students per full time tenured or tenure track faculty member. The graduate student population is very much international, with roughly 80% of them coming to McGill on a student visa. As with most engineering departments, the graduate population is mainly male, with only 11% of the PhD students being women. In 2011, 47 MEng (out of which 7 in the non-thesis option) and 21 PhD students graduated from ECE graduate programs. In 2011, 29 ECE PhD students received the McGill engineering Doctoral Award; 4 students were awarded NSERC PGS-postgraduate scholarships, and one student was awarded the prestigious Vanier scholarship.

In Fall 2011, an initiative was launched to develop two new concentrations within the current MEng in Electrical Engineering (non-thesis option), a degree which has been traditionally undersubscribed in the department.

UNDERGRADUATE PROGRAMS

ECE offers four distinct programs at the undergraduate level, all accredited by the Canadian Engineering Accreditation Board (CEAB), namely the B.Eng. in Electrical Engineering, the B.Eng. in Computer Engineering, the B.S.E. in Software Engineering and the B.Eng. in Honours Electrical Engineering. With a total of 890 enrolled students, all four programs are successful and continue to be attractive to a large population. New admissions in the program are back in an upward trend after reaching a minimum in 2007; 234 new students were admitted in 2011, a slight increase with respect to 2010. In 2011, a cohort of 151 students graduated from ECE undergraduate programs.

Several updates and revisions to course streams in the undergraduate programs have been undertaken in 2011, with a major curriculum revision to follow in 2012.

INVOLVEMENT IN THE COMMUNITY

ECE faculty members remain strongly involved in the scientific community, where a lot of them have developed a strong international visibility and reputation. In 2011, ECE members have participated in the Technical Program Committees of more than 50 international conferences, and in the organizing committee of more than 15 international conferences.

ECE professors are active in more than 20 committees of scholarly societies, and chairing 6 of them. They collectively occupy 11 positions on editorial boards of international scholarly journals.

PARTNERSHIPS

Most partnerships that ECE has developed in 2011 were on the research front. Beyond the well-established collaborations with the Department of Physics or the School of Computer Science at McGill (through e.g., the McGill Institute for Advanced Materials –MIAM and the Center for intelligent Machines – CIM), each individual faculty member has research collaborations with the Quebec and Canadian community, through active participation in Quebec *Regroupements Stratégiques* CREER, ResMiQ, RQMP (including representation on their boards) and hosting of *Regroupement Stratégique* SYTACom.

Notwithstanding numerous informal collaborations ties, in 2011, several partnerships between ECE and collaborators in India, China, France, Sweden and USA have been formalized through funding by the *Ministère du Développement Économique, de l'Innovation et des Exportations* (MDEIE) through its *Programme de Soutien à la Recherche*.

MILESTONES

In 2011, 2 new professors were hired, in the area of microelectronics, namely Professor Haibo Zeng and Professor Brett Meyer. Their arrival strengthens the department's research and teaching capacity in embedded systems and software engineering. Professor Benoit Champagne was promoted to full professor. Professors Francisco Galiana, Peter Kabal, and Boon-Teck Ooi retired in 2011, although they all remain somewhat active in research.

On November 9, 2011, Professor Anas Hamoui passed away, at the young age of 38.

HONOURS, AWARDS AND PRIZES

The long list of awards garnered by members of the ECE community is detailed in section II. In 2011, our professors obtained four additional titles of fellow of scholarly societies and four *best paper* awards.

SECTION I – UNIT STATUS UPDATE**I-A DESCRIPTION OF UNIT:**

The Department of Electrical and Computer Engineering consists of 44 full time professors, 19 professional staff members, 890 undergraduate students, 344 graduate students and 28 post-doctoral fellows. At present, it offers four distinct accredited undergraduate degree programs. These are:

- B.Eng. in Electrical Engineering
- B.Eng. in Computer Engineering
- B.S.E. in Software Engineering
- B.Eng. in Honours Electrical Engineering

At the graduate level, two Master's degree programs, in addition to a Ph.D. program, are offered. The Department currently hosts the headquarters of the NSERC funded Strategic Research Network called Healthcare Support through Information Technology Enhancements (hSITE) and of FRQNT-funded SYTACom (a provincially funded center for telecommunications research). The Intelligent Machines group is part of the Center for Intelligent Machines – an interdisciplinary operation involving researchers from the Department as well Mechanical Engineering and Computer Science.

The main mission and objectives of the Department are given below:

1. To continue to offer professional educational programs.
2. To create and maintain research activities which continue to be considered as world class when peer reviewed.
3. To provide an effective interface with industry both locally and around the world and to provide training and research that meets the needs of industry.

I-B NOMINATIVE LIST OF ACADEMIC STAFF

Abhari	Ramesh	Associate Professor	On Leave
Arbel	Tal	Associate Professor	Active
Bajcsy	Jan	Associate Professor	Active
Bouffard	Francois	Assistant Professor	Active
Boulet	Benoit	Associate Professor	On Leave
Caines	Peter	Professor	Active
Champagne	Benoit	Associate Professor	Active
Chen	Lawrence	Professor	Active
Chodavarapu	Vamsy P.	Assistant Professor	Active
Clark	Jim	Professor	On Leave
Coates	Mark	Associate Professor	Active
Cooperstock	Jeremy	Associate Professor	On Leave
El-Gamal	Mourad	Associate Professor	Active
Ferrie	Frank	Professor	Active
Giannacopoulos	Dennis	Associate Professor	Active
Gross	Warren	Assistant Professor	Active
Hamoui	Anas	Assistant Professor	Deceased
Joos	Geza	Professor	Active
Khazaka	Roni	Associate Professor	Active
Kirk	Andrew	Professor	Active
Labeau	Fabrice	Associate Professor	Active
Le-Ngoc	Tho	Professor	Active
Leib	Harry	Professor	Active
Levine	Martin	Professor	Active
Liboiron-Ladouceur	Odile	Assistant Professor	On Leave
Lowther	David	Professor	Active
Mahajan	Aditya	Assistant Professor	Active
McFee	Steve	Associate Professor	Active
Meyer	Brett	Assistant Professor	Active
Mi	Zetian	Assistant Professor	Active
Michalska	Hannah	Associate Professor	On Leave
Musallam	Sam	Assistant Professor	Active
Plant	David	Professor	Active
Popovich	Milica	Associate Professor	Active
Psaromiligkos	Ioannis	Associate Professor	Active
Rabbat	Michael	Assistant Professor	Active
Roberts	Gordon	Professor	Active
Rochette	Martin	Assistant Professor	Active
Rose	Richard	Associate Professor	Active
Shih	Ishiang	Associate Professor	On Leave
Szkopek	Thomas	Assistant Professor	Active
Vu	Mai	Assistant Professor	Active
Webb	Jonathan	Professor	Active
Zeng	Haibo	Assistant Professor	Active
Zilic	Zeljko	Associate Professor	On Leave

SECTION II - GRANTS, PUBLICATIONS, AND SERVICE OUTSIDE OF MCGILL

II-A LIST OF ECE GRANTS

- ABHARI, Ramesh: NSERC, Discovery Grant (April 2009 - March 2014) Enabling ultra wideband applications through innovation in the design of interconnects, passive elements and antennas. R. Abhari (Apr 2009-Apr 2014, \$145000-100%)
- ABHARI, Ramesh: CFI New Opportunities, Infrastructure operating Fund (April 2006 - March 2011) Infrastructure for the measurement of high-speed interconnect. R. Abhari (May 2006-May 2012, \$59288-100%)
- ABHARI, Ramesh: HSITE-Research In Motion (230918)and NSERC (219642), Research Support, (Sept. 2010- Sept. 2013)MBAN Platform for Ambulatory Monitoring, R. Abhari (principal) (Sep 2010-Sep 2013, \$112500-100%)
- ABHARI, Ramesh: Research In Motion, Research Support (Jan. 2010- Jan. 2013) Application of EBG Research In Motion, Research Support (Jan. 2010- Jan. 2013) Application of EBG Structures in Designing Compact Multi-antenna Systems, R. Abhari (principal) (Jan 2010-Jan 2013, \$108000-100%)
- ABHARI, Ramesh: NSERC, Idea to Innovation Program- Phase I (Jan. 2009- July. 2011) High-Speed Bandpass Serial Data Links. R. Abhari (PI) and Gordon Roberts (Jul 2009-Jul 2011, \$125000-50%)
- ARBEL, Tal: NSERC, Discovery Grant, Statistical inference in computer vision and medical imaging, T. Arbel (principal). (Apr 2010-Mar 2015, \$215000-100%)
- ARBEL, Tal: NSERC, Discovery Accelerator Supplement, Statistical inference in computer vision and medical imaging, T. Arbel Principal (Apr 2010-Mar 2013, \$120000-100%)
- ARBEL, Tal: NSERC, Collaborative Research & Development Grant, Probabilistic Segmentation of Multiple Sclerosis Lesions in Brain Images, T. Arbel (principal), D. L. Collins, and D. Precup.Supporting organization: NeuroRX Research Ltd., Canada. (Sep 2011-Aug 2013, \$169704-80%)
- BAJCSY, Jan: NSERC Discovery Grant: Coded Multi-terminal Communication Systems: Theory, Applications & Experiments (Apr 2006-Mar 2012, \$135500-100%)
- BAJCSY, Jan: Engineering PhD Incentive Program (Sep 2010-Aug 2012, \$3000-100%)
- BOUFFARD, Francois: FQRNT, Établissement de nouveaux chercheurs, Fast and Robust Identification of Umbrella Contingencies in Large Electricity Networks. F. Bouffard (principal). (Apr 2011-Mar 2013, \$40000-100%)
- BOULET, Benoit: NSERC Discovery Grant, "Advanced Control for Medical Applications and Renewable Energy Systems" (April 2010 - April 2015) (Apr 2010-Apr 2015, \$130000-100%)
- BOULET, Benoit: William Dawson Scholar research fund (May 2009-Apr 2014, \$75000-100%)
- CAINES, Peter E.: NSERC Discovery Operating Grant ``Distributed, Hybrid and Hierarchical Control Systems' (Apr 2009-Mar 2014, \$350000-100%)
- CAINES, Peter E.: AFOSR Dynamics and Control Program Grant ``Mean Field Control of Large Population Stochastic Systems" (Feb 2009-Apr 2012, \$348000-100%)
- CAINES, Peter E.: James McGill Professorship Grant (renewed) (Apr 2011-Mar 2018, \$95000-100%)
- CHAMPAGNE, Benoit: NSERC, Discovery Grant "Digital Signal Processing for Broadband Wireless Communications" B. Champagne (PI) (Apr 2007-Mar 2012, \$144000-100%)
- CHAMPAGNE, Benoit: NSERC, Collaborative Research & Development Grant "Adaptive Space-time Precoding and Signal Processing for Cooperative Wireless Networks" B. Champagne (PI) and T. Le-Ngoc, Industrial Partner: InterDigital Canada (Oct 2009-Sep 2011, \$132000-50%)
- CHAMPAGNE, Benoit: NSERC, Engage Grant "Efficient Digital Techniques for Noise Reduction in Adverse Acoustic Environments" B. Champagne (PI) and W.-P. Zhu (Univ. Concordia) Industrial Partner: Zarlink Semiconductor (Jan 2011-Jul 2011, \$25000-50%)

- CHEN, Lawrence R.: NSERC, Engage Grants, Development of multi-wavelength all-fiber lasers at 2 μm : Establishing a competitive advantage for O/E Land Inc. core products. L. R. Chen (principal). Supporting organization: O/E Land Inc. (Dec 2011-Jun 2012, \$25000-100%)
- CHEN, Lawrence R.: NSERC, Discovery Grants, Optical waveguides and fibers for signal processing and sensing. L. R. Chen (principal). (Apr 2010-Mar 2015, \$165000-100%)
- CHEN, Lawrence R.: NSERC, Collaborative Research and Development Grant, Strategies for developing high-channel count fiber Bragg grating-based laser sensor systems. Supporting organization: QPS Photonics. L. R. Chen (principal). (Oct 2010-Dec 2011, \$19500-100%)
- CHEN, Lawrence R.: Canadian Institute for Photonic Innovations, Technology, Exploitation, and Networking Grant, Development of a prototype all-fiber distributed Bragg reflector laser sensor system for multi-parameter sensing in stator end windings for power generators and transformers. Supporting organization: QPS Photonics. L. R. Chen (principal). (Apr 2011-Mar 2012, \$60500-100%)
- CHEN, Lawrence R.: Canadian Institute for Photonic Innovations, Technology, Exploitation, and Networking Grant, Support for student exchange. L. R. Chen (principal). (Oct 2010-Mar 2011, \$5500-100%)
- CHEN, Lawrence R.: NSERC, Strategic Projects, All-fiber infrared lasers and components for chemical detection applications. L. R. Chen (principal), X. Gu (Ryerson University), and H.-P. Look (Queen's University). Supporting organizations: IRphotonics, QPS Photonics, Optech, DRDC-Valcartier. (Oct 2010-Sep 2013, \$461950-35%)
- CHODAVARAPU, Vamsy: NSERC, Discovery Grant, Integrated CMOS based sensor microsystems for biochemical monitoring. V. Chodavarapu (Apr 2007-Mar 2012, \$105000-100%)
- CHODAVARAPU, Vamsy: CIPI, Technology Exploration and Networking Grant (August 2009 - March 2011) Optical High- Throughput In-Vitro System for Screening of Nanoparticle Toxicity on Mammalian Cells. V. Chodavarapu (Principal) (Aug 2009-Mar 2011, \$24500-100%)
- CHODAVARAPU, Vamsy: NanoQuebec, Integrative Biosensor Grant, CMOS Integrated Nitride Nanowire Array based Bacterial Biosensors. V. Chodavarapu (Principal), Zetian Mi, Marcus Lawrence, Shiv Prasher (Jan 2008-Aug 2011, \$261000-25%)
- CHODAVARAPU, Vamsy: FQRNT, Team Grant, Genetically Engineered Highly Selective and Sensitive Biosensors. V. Chodavarapu (Principal), Mark Trifiro (Apr 2009-Mar 2012, \$146200-50%)
- CHODAVARAPU, Vamsy: CIPI, Technology Exploration and Networking Grant (January 2010 - July 2011) Nanoporous silicon catheter device with real-time optical monitoring of bacterial contaminants during hemodialysis. V. Chodavarapu (Principal), M. trifiro (Jan 2010-Jun 2011, \$29900-50%)
- CLARK, James J.: NSERC, Discovery Grant (April 2010 - March 2015) Task sensitive attention tracking, J. Clark (principal). J. Clark (principal) (Apr 2010-Mar 2015, \$215000-100%)
- COATES, Mark J.: NSERC, Discovery Grant (Jun. 2007 - May 2012), Learning to Satisfy Actuator Networks, M. Coates. (Apr 2007-Apr 2012, \$117000-100%)
- COATES, Mark J.: PROMPT Quebec, Major Projects, (Jun. 2009 - Jun. 2011) hSITE: Healthcare Support through Information Technology Enhancements, M. Coates (principal) and 5 others (Jun 2009-Jun 2011, \$147600-16%)
- COATES, Mark J.: MPrime (NSERC NCE), Full Project, (Apr. 2008 - Apr. 2012) , Decentralized Processing and Fusion in Surveillance Networks, M. Coates (principal) and 5 others (Apr 2008-Apr 2012, \$260000-40%)
- COATES, Mark J.: PROMPT Quebec, Major Projects, (Jun. 2009 - Jun. 2011) hSITE: Healthcare Support through Information Technology Enhancements, M. Coates (principal) and 5 others (Jun 2011-Jun 2014, \$442800-16%)
- COOPERSTOCK, Jeremy R.: NSERC, Discovery Grant: Enhanced video for shared reality environments (1/1/2006-31/12/2011, \$100000-100%)

Section II: Grants, publications, and service outside of McGill

- COOPERSTOCK, Jeremy R.: MDEIE, Programme de soutien à la recherche: Natural Interactive Walking (1/1/2008-31/12/2008, \$367195-100%)
- COOPERSTOCK, Jeremy R.: CIRMMT Strategic Innovation Fund Award: Acoustic Sculptures (1/1/2011-31/12/2012, \$10000-100%)
- COOPERSTOCK, Jeremy R.: NSERC Engage Program: Improved Parallax Barrier Autostereoscopic Display Software. (1/1/2011-31/12/2011, \$25000-100%)
- COOPERSTOCK, Jeremy R.: Google Research: A Spatialized Audio Map System for Mobile Blind Users. Google Research Awards. (1/1/2010-31/12/2011, \$50000-100%)
- EL-GAMAL, Mourad N.: William Dawson Scholar Award (2010 - 2015): "RF MEMS for Wireless Applications" Investigator: Mourad El-Gamal. (1/1/2010-31/12/2015, \$75000-100%)
- EL-GAMAL, Mourad N.: NSERC Discovery Grant (2006 - 2011): "Systems and Technologies for Emerging Wireless Communications" Investigator: Mourad El-Gamal. (Apr 2006-Mar 2011, \$200000-100%)
- FERRIE, Frank P.: NSERC Discovery: Visual Models and Applications (Apr 1996-Mar 2011, \$210000-100%)
- FERRIE, Frank P.: NSERC Discovery: Interpretation of Visual Models (Apr 2011-Mar 2016, \$100000-100%)
- FERRIE, Frank P.: MITACS Accelerate: Automatic Spinal Segmentation for MAR Analysis (Feb 2011-Aug 2011, \$15000-100%)
- FERRIE, Frank P.: VP Research, McGill: contribution to REPARTI (yearly, renewable), F. Ferrie & 8 others (Jun 2010-Jun 2011, \$45000-11%)
- FERRIE, Frank P.: VP Research, McGill: contribution to REPARTI (yearly, renewable), F. Ferrie & 8 others (Jun 2011-Jun 2012, \$45000-11%)
- GIANNACOPOULOS, Dennis: NSERC, Discovery Grant-Individual, Hybrid parallel adaptive finite element analysis and design for high-speed microelectronic system interconnections. D. Giannacopoulos (principal). (Apr 2011-Mar 2016, \$140000-100%)
- GIANNACOPOULOS, Dennis: NSERC, Discovery Grant-Individual, Hybrid parallel adaptive finite element analysis and design for high-speed microelectronic system interconnections. D. Giannacopoulos (principal). (Apr 2006-Mar 2011, \$185000-100%)
- GIANNACOPOULOS, Dennis: McGill Faculty of Engineering Discretionary Fund. D. Giannacopoulos (PI) (Apr 2007-Dec 2011, \$6000-100%)
- GROSS, Warren J.: NSERC, Discovery Grant, Design and Implementation of Coded Signal Processing Systems. W. Gross (principal) (Apr 2009-Mar 2014, \$280000-100%)
- GROSS, Warren J.: NSERC, Discovery Accelerator Supplement, Design and Implementation of Coded Signal Processing Systems. W. Gross (principal) (Apr 2009-Mar 2012, \$120000-100%)
- GROSS, Warren J.: Discretionary, W. Gross (principal) (Oct 2011-Nov 2011, \$750-100%)
- GROSS, Warren J.: Startup Grant, W. Gross (principal) (Sep 2003-Aug 2012, \$70000-100%)
- JOOS, Geza: NSERC, Discovery Grant, Static power converters for generation and control in power systems. G. Joos (individual) (Apr 2011-Mar 2016, \$250000-100%)
- JOOS, Geza: CRC Tier 1, Research Fund, Intelligent distribution systems. G. Joos (individual) (Jan 2011-Dec 2018, \$420000-100%)
- JOOS, Geza: NSERC/Hydro-Quebec Industrial Research Chair on the Integration of Renewable Energies and Distributed Generation into the Electric Distribution Grid. G. Joos (individual) (Sep 2009-Aug 2014, \$750000-100%)
- JOOS, Geza: NSERC/Hydro-Quebec Industrial Research Chair on the Integration of Renewable Energies and Distributed Generation into the Electric Distribution Grid. Supporting organization: Hydro-Quebec. G. Joos (individual) (Sep 2009-Aug 2014, \$750000-100%)
- KHAZAKA, Roni: NSERC, Discovery Grant, "Design automation for managing the complexity of mixed-domain microsystems", R. Khazaka (principal) (Apr 2007-Apr 2012, \$121500-100%)

- KIRK, Andrew: NSERC, Discovery Grant (2007-2011), Nanoplasmonic Optical Biosensors, A.Kirk (PI) (Apr 2007-Mar 2012, \$180000-100%)
- KIRK, Andrew: McGill University, William Dawson Scholar (May 2007-Apr 2011, \$105000-100%)
- KIRK, Andrew: Bourse d'enseignement en genie (Québec Government, MELS), A.Kirk (PI) (Apr 2009-Mar 2015, \$125000-100%)
- KIRK, Andrew: James McGill Chair (May 2011-Apr 2018, \$105000-100%)
- KIRK, Andrew: FQRNT, Recherche en Equipe (April 2008-March 2011), Senseurs à résonance de plasmon de surface à sensibilité accrue, A.Kirk (PI), M.Tabrizian, P.Charette, J.Beauvais (Apr 2008-Mar 2010, \$174000-35%)
- KIRK, Andrew: NanoQuebec (2010-2012), Integrated polymer electro-optic switches, A.G.Kirk (PI), M. Andrews (Sep 2010-Aug 2012, \$120000-50%)
- KIRK, Andrew: NSERC Strategic Research Projects, Direct integration of microtube lasers on silicon, A.Kirk (PI), Z. Mi, D.Plant (Apr 2009-Mar 2013, \$408900-40%)
- KIRK, Andrew: NSERC CREATE program (2010-2015), NSERC CREATE training program in Integrated Sensor Systems, Kirk, A.G. (PI) and 9 others (May 2011-Apr 2018, \$1650000-10%)
- LABEAU, Fabrice: NSERC- Hydro-Quebec, Industrial Research Chair (November 2010-October 2015), Interactive Information Infrastructure for the Power Grid, Christophe Pierre (F. Labeau chairholder) (Nov 2010-Oct 2015, \$875000-100%)
- LABEAU, Fabrice: NSERC, Discovery Grant, Robust Multimedia Transmission through Generalized Multiple Descriptions, F. Labeau (May 2006-Apr 2011, \$123000-100%)
- LABEAU, Fabrice: PROMPT-Québec Major Projects, Allocation et gestion de ressources dynamiques : méthodes pratiques et multi-couches, F. Labeau (principal), T. Le-Ngoc and M. Mehmet-Ali (Nov 2009-Oct 2011, \$170000-30%)
- LABEAU, Fabrice: MDEIE Programme de soutien à la recherche, volet : Soutien à des initiatives internationales de recherche et d'innovation, 2eme appel conjoint Quebec-Chine (Apr 2010- Mar 2013), e-Santé sans-fil et technologies habilitantes, F. Labeau (principal) and T. Le-Ngoc (Apr 2010-Mar 2013, \$142700-50%)
- LABEAU, Fabrice: MDEIE-MELS Initiative Inde 2010 Ateliers de maillage en télécommunications SYTACom / IISc / IIT-Delhi / IIT-Madras F. Labeau (Sep 2010-Sep 2011, \$17000-20%)
- LEIB, Harry: NSERC, Individual Discovery Grant, Transmission techniques for fast fading channels with applications to inter-vehicle communication systems (Apr 2011-Mar 2016, \$160000-100%)
- LEIB, Harry: Research in Motion (RIM) and NSERC, CRD, Cooperative spectrum sensing and information relaying in cognitive wireless communication RIM contribution (May 2011-Apr 2014, \$160011-100%)
- LEIB, Harry: NSERC contribution to the above CRD grant (May 2011-Apr 2014, \$167940-100%)
- LE-NGOC, Tho: NSERC, Discovery Grant, Cooperative multi-dimensional transmission and resource allocation techniques for broadband access systems (Apr 2011-Mar 2016, \$385000-100%)
- LE-NGOC, Tho: NSERC, CRC Tier I, Broadband Access Communications (Jul 2007-Jun 2014, \$1400000-100%)
- LE-NGOC, Tho: NSERC-Bell Canada IRC, Performance and Resource Management in Broadband xDSL Access Networks (May 2008-Apr 2013, \$1431860-100%)
- LE-NGOC, Tho: PROMPT-Québec, Multi-Dimensional Coding & Signal Processing for Broadband Wireless Communications, (with InterDigital Canada), (PI: T. Le-Ngoc, Co-I: Dr. B. Champagne, Dr. Mohammad Reza Soleymani of Concordia University) (Jan 2009-Dec 2011, \$277500-33%)
- LE-NGOC, Tho: NSERC, Strategic Grant, Distributed energy-aware information infrastructure: A path to robust and sustainable IT, (PI: Tho Le-Ngoc, Co-Investigators: Dr. Fabrice Labeau, Dr. Warren Gross, Dr. Geza Joos, Dr. Mai Vu, Dr. Ha Nguyen of University of Saskatchewan) (Sep 2009-Sep 2012, \$708000-24%)

- LEVINE, Martin: NSERC Discovery Grant (May 2009-Apr 2014, \$127600-100%)
- LIBOIRON-LADOUCEUR, Odile: FQRNT, Établissement de nouveaux chercheurs. Interface optique transparente à basse puissance et très grande bande passante pour les communications de données à haut débit binaire. O. Liboiron-Ladouceur (Principal) (Apr 2009-Dec 2011, \$39948-100%)
- LIBOIRON-LADOUCEUR, Odile: NSERC, Discovery Grant. Low-power photonic interconnects for Data Centres. O. Liboiron-Ladouceur (Principal) (Apr 2009-Mar 2013, \$100000-100%)
- LIBOIRON-LADOUCEUR, Odile: NCE, CIPI-TEN, Development of Optically Enhanced interconnectivity for Computing Platforms. O. Liboiron-Ladouceur (Principal). Reflex Photonics (Supporting organization) (Apr 2011-Mar 2012, \$25000-100%)
- LIBOIRON-LADOUCEUR, Odile: CRC, Tier II, Energy-Efficient Hybrid Interconnects for High-Performance Computing Platforms. O. Liboiron-Ladouceur (Principal) (Jun 2011-May 2015, \$500000-100%)
- LIBOIRON-LADOUCEUR, Odile: FQRNT, Projet de recherche en équipe. Technologies avancées pour les réseaux d'interconnexions écoénergétiques dans les centres de traitement de l'information. O. Liboiron-Ladouceur (Principal) (Apr 2011-Mar 2013, \$126000-50%)
- LOWTHER, David A.: NSERC Discovery Grant (2010-2015), "Multi-Objective Optimization and Parameter Uncertainty in the Design of Low Frequency Electromagnetic Devices and Systems" (Apr 2010-Mar 2015, \$165000-100%)
- LOWTHER, David A.: James McGill Professor (2005-2012), "Robust Design Systems for Electromagnetic Devices" (Mar 2005-Apr 2012, \$105000-100%)
- LOWTHER, David A.: Canadian Bureau for International Education (2011-2012), "The Investigation of Coupled Electromagnetic Field Problems" (matched by an equivalent value grant in Brazil by CAPES to the Federal University of Minas Gerais) - awarded August 2011 for 2012 (Sep 2011-Dec 2012, \$33600-100%)
- MAHAJAN, Aditya: NSERC, Discovery Grant, Optimal Control of Dynamic Teams A. Mahajan (PI) (Apr 2011-Apr 2015, \$140000-100%)
- McFEE, Steve: NSERC, Discovery Grant (April 2008 - March 2014) Meshless adaptive finite element and boundary element methods for electromagnetic system modelling and simulation in parallel computing environments. S. McFee. (Apr 2008-Mar 2014, \$131250-100%)
- MEYER, Brett: University start-up funds (May 2011-December 2011, \$120000-100%)
- MEYER, Brett: Chwang-Seto Faculty Scholar Award (May 2011-May 2013, \$30000-100%)
- MI, Zetian: NSERC, Discovery Grant, Antimony-based semiconductor nanostructures: epitaxial growth, characterization, and photonics at the nanoscale, Z. Mi (principal) (Apr 2008-Mar 2013, \$131560-100%)
- MI, Zetian: McGill University, Hydro-Quebec Nano-Engineering Scholar Award, Z. Mi (Jan 2009-Dec 2014, \$150000-100%)
- MI, Zetian: NSERC, Engage Grant, Electron overflow in Nanowire Light Emitting Diodes, Z. Mi (principal) (Nov 2011-May 2012, \$25000-100%)
- MI, Zetian: McGill University, William Dawson Scholar Award, Z. Mi (Jan 2011-Dec 2015, \$50000-100%)
- MI, Zetian: CFI, Infrastructure Operating Fund, Molecular beam epitaxial growth infrastructure, Z. Mi (principal) (Oct 2008-Sep 2013, \$50000-100%)
- MI, Zetian: US Army Research Office, Short Term Innovative Project, 1.55 μm InGaN Nanowire Lasers on Silicon, Z. Mi (principal) (Sep 2011-May 2012, \$50000-100%)
- MI, Zetian: NSERC, Strategic Grant, Full Solar Spectrum InGaN Tandem Solar Cells on Si, Z. Mi (principal), H. Guo, and I. Shih (Oct 2009-Sep 2012, \$378000-50%)
- MI, Zetian: NSERC, Strategic Grant, Ultrasensitive InN Nanowire Biosensors for Real Time, Label Free Detection of Polymorphic DNA Sequences in Living Systems, Z. Mi (principal), R. Sladek, P. Grutter, and H. Guo (Oct 2009-Sep 2012, \$406500-45%)

- MI, Zetian: NSERC, Strategic Grant, A Novel Nanophotonic Based Nanoparticle Detection System for Managing Nanotechnology Wastes, Z. Mi (principal) and Z. Chen (Concordia) (Oct 2009-Sep 2012, \$305500-65%)
- MI, Zetian: FQRNT, Team Grant, Antimony-Based Long Wavelength (1.55 μm and 2.0 – 5.0 μm) Self-Organized Quantum Dot Lasers, Z. Mi (principal), V. Aimez, and P. Grutter (Apr 2010-Mar 2013, \$220000-40%)
- MI, Zetian: NSERC, Strategic Grant, Ultrahigh-efficiency phosphor-free InGaN/GaN dot-in-a-wire white light emitting diodes monolithically grown on silicon, Z. Mi (principal), G. Botton, H. Guo, and I. Shih (Oct 2011-Sep 2014, \$453000-35%)
- MI, Zetian: NSERC, Strategic Grant, Green Hydrogen: Solar-powered photochemical water splitting on InGaN nanowire arrays, Z. Mi (principal), H. Guo, and A. Sun (Oct 2011-Sep 2014, \$399000-40%)
- MICHALSKA, Hannah: NSERC Discovery Grant (Individual) , Design of nonlinear feedback control systems". (Apr 2007-Apr 2013, \$120000-100%)
- MUSALLAM, Wissam Sam: CIHR, Operating Grant (2007 - 2011), Static and Dynamic Reach Encoding by the Parietal and Pre-motor Cortices: Application to Brain Machine Interfaces, S. Musallam (Principle) (Jan 2007-Apr 2012, \$521500-100%)
- MUSALLAM, Wissam Sam: CRC, Award-Discretionary (2007 - 2011), Cognitive Control Signals for Neural Prosthetics, S. Musallam. (amount listed is portion of CRC used for research). (Apr 2007-apr 2012, \$100000-100%)
- MUSALLAM, Wissam Sam: NSERC, Discovery Program- Individual (2008 - 2012), The creation of implants for brain-machine interfaces, S. Musallam (Apr 2007-Apr 2013, \$145200-100%)
- MUSALLAM, Wissam Sam: Fonds sur la Recherche sur la nature et les technologies (FQRNT) (2010-2013). Hybrid Silicon FQRNT Sensory Electrode Arrays: Simultaneous Recording of Oxygen and Electrical Activity from the Brain. S. Musallam (principal applicant), Vamsy Chodavarapu, Mark Andrews (co-applicants) (Apr 2010-Apr 2013, \$165000-70%)
- PLANT, David V.: James McGill Professorship (Jun 2008-May 2015, \$280000-100%)
- PLANT, David V.: NSERC - Discovery Grant(terminating) Heterogeneous Platforms - A Confluence of Photonics, Optoelectronics, and Microelectronics for Computing and Communications (Apr 2006-Mar 2011, \$258000-100%)
- PLANT, David V.: NSERC Discovery Grant (renewal) Scaling Fiber Optic and Micro/Millimeter Wave Communication Systems in the Next Decade and Beyond (Apr 2011-Mar 2016, \$345000-100%)
- PLANT, David V.: Canadian Institute for Photonic Innovation (CIPI)/NCE Grant: Optical Packet Switched Architectures and Technologies for Data Centers (Apr 2009-Mar 2012, \$117000-100%)
- PLANT, David V.: NSERC/Bell Canada Industrial Research Chair: Ultra-High Bit Rate Optical Transport and Access Networks; NSERC component (Oct 2008-Dec 2013, \$715930-100%)
- PLANT, David V.: NSERC stategic Research Network: Healthcare Support through Information Technology Enhancements (hSITE)D.V.Plant (PI) and 15 others; supporting organizations include: RIM, TELUS, IBM, Alberta Health Services, and ParaMed; NSERC Component (Jan 2009-Dec 2014, \$4665416-15%)
- PLANT, David V.: NSERC stategic Research Network: Healthcare Support through Information Technology Enhancements (hSITE)D.V.Plant (PI) and 15 others; supporting organizations include: RIM, TELUS, IBM, Alberta Health Services, and ParaMed; Industry Component (Jan 2009-Dec 2014, \$925000-15%)
- PLANT, David V.: PROMPT Quebec: Ultra-High Bit Rate Optical Transport and Access Networks; D.V. Plant (PI) and 3 others; supporting organization: Bell Canada (Jan 2010-Dec 2012, \$243416-33%)

- PLANT, David V.: Centre pour les systèmes et technologies avancés en communications (SYTACom). D.V.Plant (PI) and 50 others SYTACom is funded under the FQRNT Regroupement Strategique program: FQRNT Component (Apr 2011-Mar 2017, \$2736000-25%)
- PLANT, David V.: Centre pour les systèmes et technologies avancés en communications (SYTACom). D.V.Plant (PI) and 50 others SYTACom is funded under the FQRNT Regroupement Strategique program: FQRNT Component (Apr 2004-Mar 2011, \$2087000-25%)
- PLANT, David V.: NSERC/Bell Canada Industrial Research Chair: Ultra-High Bit Rate Optical Transport and Access Networks; Bell Canada component (Oct 2008-Dec 2013, \$715930-100%)
- PLANT, David V.: NSERC/Bell Canada Industrial Research Chair: Ultra-High Bit Rate Optical Transport and Access Networks; McGill component (Oct 2008-Dec 2013, \$715930-100%)
- PLANT, David V.: Centre pour les systèmes et technologies avancés en communications (SYTACom). D.V.Plant (PI) and 50 others SYTACom is funded under the FQRNT Regroupement Strategique program: McGill Component (Apr 2011-Mar 2017, \$420000-100%)
- PLANT, David V.: Centre pour les systèmes et technologies avancés en communications (SYTACom). D.V.Plant (PI) and 50 others SYTACom is funded under the FQRNT Regroupement Strategique program: McGill Component (Apr 2004-Mar 2011, \$575000-100%)
- PLANT, David V.: Overhead Grant (1/1/2000-31/12/2015, \$87235-100%)
- POPOVIC, Milica: NSERC - Discovery Grant, "Microwave-acoustic breast tumor detection and design and analysis of wireless implants for neurophysiological research" (Mar 2007-Mar 2012, \$173750-100%)
- PSAROMILIGKOS, Ioannis: NSERC, Discovery Grant, Efficient transmission and reception methods for future wireless communications systems. (Apr 2007-Mar 2012, \$103500-100%)
- PSAROMILIGKOS, Ioannis: FQRNT, Projet de Recherche en equipe, Future Ultra Wideband technologies for asset identification and location. I. Psaromiligkos (principal), B. Champagne and W. Gross. (Apr 2008-Mar 2012, \$145800-33%)
- RABBAT, Michael: NSERC, Discovery Grant, Inference and Characterization of Biological Signaling Networks. M Rabbat (principle). (Apr 2007-Mar 2012, \$90000-100%)
- RABBAT, Michael: MDEIE, PSR-SIIRI, Message-Passing Algorithms for Inference, Optimization, and Scheduling in Wireless Networks. M Rabbat (principle). International collaborator: V Lau (Hong Kong University of Science and Technology) (Jan 2011-Dec 2013, \$92000-100%)
- RABBAT, Michael: FQRNT, Team Grant, Distributed Training of Deep Learning Architectures on Massive Data Sets. M Rabbat (principle), Y Bengio (U de Montreal). (Apr 2011-Mar 2014, \$157500-75%)
- ROBERTS, Gordon: James McGill Professorship (2008-2014), Design and Test Of Microsystems In Nanometer Technologies, GW Roberts (Jan 2008-Dec 2014, \$140000-100%)
- ROBERTS, Gordon: NSERC, Discovery (2011-2016), Design-For-Test Techniques For 60 GHz ISM Radio Applications,, G. W. Roberts. (Apr 2011-Mar 2016, \$167000-100%)
- ROBERTS, Gordon: Quebec Government (2009-2013), Education Award, bourse d'enseignement en genie, Ministère do l'Éducation, du Loisir et du Sport, G. W. Roberts (Jan 2009-Dec 2013, \$50000-20%)
- ROBERTS, Gordon: NSERC-NCE (2011-2012) Pollution and Particle Sensors for Environment-Aware Vehicles, W-T. Ng. (principle), G. Roberts + 4 others. (Apr 2011-Mar 2012, \$87500-17%)
- ROCHETTE, Martin: NSERC, discovery grant, All-optical signal processing devices based on optical nonlinearities. (Apr 2007-Mar 2012, \$95000-100%)
- ROCHETTE, Martin: Start-up grant, McGill University (Sep 2006-Oct 2012, \$100000-100%)
- ROCHETTE, Martin: INO, Research scholarship (Jan 2011-Jan 2013, \$45000-100%)
- ROCHETTE, Martin: CIPI, Technology Exploitation and Networking (TEN) program, Self-pulsating laser sources. (Nov 2009-Mar 2012, \$51000-100%)

- ROCHETTE, Martin: CIPI, Technology Exploitation and Networking (TEN) program, Écriture de réseaux de Bragg dans les microfils hybrides pour les applications hautement nonlinéaires. (Apr 2011-Apr 2012, \$127000-100%)
- ROCHETTE, Martin: NSERC, I2I, Fabrication of hybrid AsSe/PMMA based devices. (Aug 2010-Nov 2011, \$112000-100%)
- ROCHETTE, Martin: CIPI, Technology Exploitation and Networking (TEN) program, Fabrication de microfils hybrides chalcogénure/polymères. (Jul 2010-Apr 2012, \$171000-100%)
- ROSE, Richard: Google Faculty Research Award. Reduced Cost Automatic Speech Recognition Technology for Extending Text Based Search Applications to Spoken Language Interfaces. Richard Rose (principal). (Apr 2010-Mar 2012, \$55000-100%)
- ROSE, Richard: NSERC Discovery Grant. Efficient Configuration of Robust Spoken Language Based Human Interfaces. Richard Rose (principal). (Apr 2010-Mar 2015, \$115000-100%)
- ROSE, Richard: NSERC Engage Grant. Tools for Open-Ended Language Proficiency Evaluation. Richard Rose (principal). (Oct 2011-Apr 2012, \$25000-100%)
- ROSE, Richard: MDEIE PSR-SIIRI Quebec-India Collaboration. Enabling Technologies for Mobile Speech Recognition Services in Low-Resource Languages. Richard Rose (principal) and Doug O'Shaughnessy (INRS). (Oct 2010-Sep 2013, \$150000-67%)
- ROSE, Richard: FQRNT, Regroupements Strategiques. Centre de de Recherche sur les Systèmes et Technologies Avancés en Communications (SYTACom). D. Plant (principal) and 26 others. (Apr 2011-Mar 2017, \$2736000-2%)
- SHIH, Ishiang: NSERC Discovery Grant (Apr 2009-Mar 2014, \$150000-100%)
- SHIH, Ishiang: NSERC Strategic Project (with Z. Mi) Full Solar Spectrum InGaN Solar Cells (Oct 2008-Sep 2011, \$375000-50%)
- SZKOPEK, Thomas: NSERC, Discovery Grant (May 2008 - April 2013), Nanoscale Quantum Electronics, T. Szkopek (principal). (May 2008-Apr 2013, \$116000-100%)
- SZKOPEK, Thomas: Canadian Institute for Advanced Research (CIFAR), NanoElectronics Program (June 2007 - May 2014), Scholar, T. Szkopek (principal). (Jun 2007-May 2014, \$175000-100%)
- SZKOPEK, Thomas: Canada Research Chair (Nov. 2008 - Oct. 2013) Nanoscale Electronics. T. Szkopek (principal). (65% towards salary, 35% towards research) (Nov 2008-Oct 2013, \$500000-65%)
- SZKOPEK, Thomas: FQRNT, Équipe (May 2008 - April 2011) Organization of Discrete Nanoparticles with DNA, T. Szkopek (principal), P. Grutter and H. Sleiman. (May 2008-Apr 2011, \$208100-50%)
- SZKOPEK, Thomas: FQRNT, Équipe (May 2011 - April 2014) Fabrication de prototypes électroniques à base de graphène dédiés au domaine des micro-ondes. T. Szkopek (principal), M. Sij and C. Caloz. (May 2011-Apr 2014, \$162000-51%)
- VU, Mai: FQRNT New Researcher Grant (April 2010 - March 2012) Distributed Communications in Cognitive Wireless Networks, M. Vu (principal) (Apr 2009-Mar 2014, \$125000-100%)
- VU, Mai: Realistic cooperative communications in wireless networks, M. Vu (principal) (Apr 2010-Mar 2012, \$39948-100%)
- WEBB, Jonathan: NSERC, Discovery Grant, Finite element analysis of electromagnetic devices. J. Webb. (Apr 2007-Mar 2013, \$236250-100%)
- ZENG, Haibo: Startup fund (Nov 2011-dec 2011, \$100000-100%)
- ZILIC, Zeljko: NSERC, Discovery Grant, Design for Post-fabrication Debug of Microsystems, Z. Zilic (principal). This application was nominated by Discovery Accelerator Supplement (DAS) by GSC 334. 183 nominations in total for that year were given by NSERC (Apr 2008-Mar 2013, \$127400-100%)
- ZILIC, Zeljko: ARM Holdings, Keil Tools Donation, Z. Zilic, 20 programming/debug controllers and 20 seats of MDK-ARM Integrated Development Environment (Jan 2011-Dec 2012, \$63980-100%)

- ZILIC, Zeljko: ST Microelectronics, iNEMO Donation, Z. Zilic, 17 iNEMO multi-sensory embedded system development kits for microsystems, in-kind (Jan 2011-Dec 2012, \$6483-100%)
- ZILIC, Zeljko: NSERC Engage, Assertion-based Semi-formal Verification, Z. Zilic (principal) (Jun 2010-31-Jan 2011, \$23500-100%)
- ZILIC, Zeljko: Wighton Fellowship - Sandford Fleming Foundation and National Council of Deans of Engineering and Applied Science (Apr 2005-Mar 2012, \$3000-100%)
- ZILIC, Zeljko: Strategic Program Grant, Quality-driven Integrated System Design, Z. Zilic (principal), N. Nicolici and A. Ivanov (Oct 2010-Sep 2013, \$312000-40%)
- ARBEL, Tal: NSERC, Collaborative Health Research Projects, Computational and Statistical Tools for Image-Guided Neurosurgery of Brain Tumours, D.L. Collins (principal), T. Arbel, J. Cooperstock, R.F. Del Maestro, D. Klein, A. Olivier, K.Petrecchia, M. Petrides, T.M. Peters. (Apr 2010-Mar 2012, \$628198-7%)
- ARBEL, Tal: NSERC, Strategic Project Grant, Tissue Segmentation in MRI, D.L. Collins (principal) and T. Arbel. Supporting organization: NeuroRX Research Ltd., Canada. (Sep 2007-31-Jan 2011, \$615266-50%)
- ARBEL, Tal: FQRNT, Regroupements Strategiques, REPARTI - A Strategic Team for the Study of Distributed Intelligent Shared Environments, D. Laurendeau (Universite Laval, principal), 25 others (Apr 2006-Mar 2012, \$1500000-3%)
- BAJCSY, Jan: FQRNT, Regroupement Strategique, Centre for Advanced Systems & Technologies in Communications (SYTACom), D. Plant and 52 other researchers at McGill, Laval U, Concordia, INRS-EMT, UQAM, ETS and Ecole Polytechnique (1/1/2010-31/12/2015, \$1700000-1%)
- BOULET, Benoit: Network of Centres of Excellence, AUTO21, Automotive Glass Exciter Technologies for Subwoofer Applications (April 2009-2012), C. Novak (PI), R. Brennan, B. Boulet, R. Gaspar, A. Khajepour, (Apr 2009-Mar 2012, \$170000-12%)
- BOULET, Benoit: MagNET NSERC Strategic Network, "Developing magnesium materials for the transportation sector" (2008-2013) (Warren Poole, UBC (PI) B. Boulet and 16 others, Boulet's project starts in 2011) (Apr 2008-Mar 2013, \$4800000-5%)
- BOULET, Benoit: Diabete Quebec, Faisabilité et sureté d'un algorithme de contrôle en boucle fermée à deux hormones pour réguler la glycémie nocturne chez les diabétiques de type 1, Dr. Laurent Legault, PI (Apr 2010-Dec 2012, \$20000-33%)
- BOULET, Benoit: Canadian Diabetes Association, Operating Grant, Closed-loop control of glucose levels in type 1 diabetes: preliminary clinical trials, Dr. Remi Rabasa-Lhoret, PI (Sep 2011-Dec 2012, \$55000-33%)
- CAINES, Peter E.: FQRNT supporting grant to the Centre for Intelligent Machines (CIM): Regroupement Strategique REPARTI: McGill and Univ. Laval. PI : D. Laurendau. Total \$300,000 per year; McGill portion \$120,000 per year (4 years 2006-2011) (Apr 2006-mar 2011, \$1200000-5%)
- CHAMPAGNE, Benoit: FQRNT, Team Research Grant "Ultra Wideband Wireless Technologies for the Identification and Localization of Assets" I. Psaromiligkos (PI), B. Champagne and W. Gross (May 2008-Apr 2012, \$194000-33%)
- CHEN, Lawrence R.: NSERC, Collaborative Research and Training Experience Program, NSERC CREATE for next-generation optical networks. S. S.-H. Yam (principal) and J. C. Cartledge (Queen's); L. R. Chen and D. V. Plant (McGill); S. LaRoche and L. A. Rusch (Laval) (Apr 2010-Mar 2016, \$1650000-18%)
- CHEN, Lawrence R.: Canadian Institute for Photonic Innovations, Research Projects Grant, Optical packet-switched architecture and technologies for data centers. S. LaRoche (principal) and L. A. Rusch (Laval); L. R. Chen and D. V. Plant (McGill); A. Leon-Garcia (University of Toronto). (Apr 2009-Mar 2012, \$643908-12%)

- CHODAVARAPU, Vamsy: FQRNT, Equip Grant, Hybrid Silicon Sensory Neuralectrodes: Simultaneous Recording of Oxygen and Electrical Activity from the Brain. S. Musallam (principal), V. Chodavarapu and M. Andrews (Apr 2010-Mar 2013, \$168000-30%)
- CHODAVARAPU, Vamsy: FQRNT-ArboraNano Nanotechnology and Forestry research, Encres à base de nano cellulose cristalline pour une sécurité et une couleur renforcées. M. Andrews (Principal), A. Kirk, V. Chodavarapu (Apr 2010-Mar 2013, \$225000-25%)
- CHODAVARAPU, Vamsy: Orthopedic Trauma Association, The Use Of Implantable Radio-Frequency Micro-Machined Capacitive Sensor Chips To Monitor Compartment Pressures In The Lower Limb - Ed Harvey (Principal), V. Chodavarapu (Jan 2011-Dec 2011, \$19500-50%)
- CHODAVARAPU, Vamsy: CIHR Catalyst Grant (January 1, 2011 - December 31, 2011) - Implantable Device for Early Detection of Orthopedic Infection, J. Henderson (Principal), Ed Harvey, V. Chodavarapu (Jan 2011-Jun 2012, \$99500-33%)
- CHODAVARAPU, Vamsy: NSERC CREATE, CREATE Program in Integrated Sensor Systems. A. Kirk (Principal), V. Chodavarapu, Peter Grutter; Patrick Desjardins; Drouin Dominique; M. Chaker, L. Frechette; D. Juncker; B. Lennox; T. Szkopek; R. Kashyap (Apr 2010-Mar 2015, \$1625000-0%)
- CLARK, James J.: FQRNT, Regroupements Strategiques (April 2006 - March 2012), Reparti - A Strategic Team for the Study of Distributed Intelligent Shared Environments. D. Laurendeau (Universite Laval, principal), 23 others. (Apr 2006-Mar 2012, \$1200000-5%)
- COATES, Mark J.: NSERC Strategic Network, hSITE: Healthcare Support through Information Technology Enhancements, D. Plant and 14 others (Jan 2009-Dec 2013, \$4763975-8%)
- COATES, Mark J.: NSERC Strategic Network Enhancement Initiative, hSITE: Healthcare Support through Information Technology Enhancements, D. Plant and 14 others (Jan 2011-Dec 2011, \$80000-40%)
- COOPERSTOCK, Jeremy R.: NCE, Research Centres: Graphics, Animation and New Media (GRAND). K. Booth (principal) and 50 others. (1/1/2009-31/12/2014, \$23000000-2%)
- COOPERSTOCK, Jeremy R.: NSERC Collaborative Health Research Projects: Computational and statistical tools for image guided neurosurgery of brain tumors. L. Collins (principal). (1/1/2010-31/12/2014, \$327000-0%)
- EL-GAMAL, Mourad N.: NSERC/CRIAQ Collaborative Research and Development Grant (2010 - 2012) "Data Networks and Smart Sensors for Safety-Critical Avionics Applications" With Thales Avionics Canada Inc. and Bombardier Investigators: Mohamad Sawan, Mourad El-Gamal, and 6 others. (Jan 2010-Dec 2012, \$960000-18%)
- "EL-GAMAL, Mourad N.: Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT) - A Quebec Research Center (2008 - 2013):
- Regroupement stratégique en microélectronique du Québec (ReSMiQ) Investigators: Mohamed Sawan, Mourad El-Gamal, and 26 others. (1/1/2008-31/12/2013, \$2937500-4%)"
- FERRIE, Frank P.: NSERC-CRD: Collaborative, Human-focused, Assistive Robotics for Manufacturing, E. Croft (UBC) & 4 others (Jul 2011-Dec 2015, \$621033-20%)
- FERRIE, Frank P.: NCE-GEOIDE: Three-Dimensionalizing Surveillance Networks, J.Elder (York) & 6 others (Jun 2009-jun 2012, \$727500-19%)
- FERRIE, Frank P.: FQRNT: Regroupement stratégique pour l'Etude des Environnements PARTagés Intelligents répartis: REPARTI, Denis Laurendeau (Laval) and 24 others (Jun 2006-May 2013, \$2310000-4%)
- GIANNACOPOULOS, Dennis: FQRNT, Regroupements stratégiques / Centres de recherche (May 2008 - April 2011) Centre de Recherche En Electronique Radiofréquence (CREER). K. Wu (principal) and 33 others. (Apr 2008-Mar 2011, \$990000-3%)
- GIANNACOPOULOS, Dennis: FQRNT, Regroupements stratégiques / Centres de recherche (Centre de Recherche En Electronique Radiofréquence (CREER). K. Wu (principal) and 33 others. (Apr 2011-Mar 2013, \$300000-3%)

- GIANNACOPOULOS, Dennis: FQRNT, Regroupements stratégiques ,Calcul Québec. N. Mousseau (principal) and 114 others. (Apr 2011-Mar 2014, \$1350000-0%)
- GIANNACOPOULOS, Dennis: NanoQuebec, Infrastructure Québécoise en Nanotechnologie (IQN) ,Calcul Québec. N. Mousseau (principal) and 114 others. (Apr 2011-Mar 2014, \$345000-0%)
- GROSS, Warren J.: NSERC, Strategic Project Grant, Distributed Energy-Aware Information Infrastructure: A Path to Robust and Sustainable IT. T. Le-Ngoc (principal) and 5 others (McGill, U. Sask). (Sep 2009-Sep 2012, \$708000-17%)
- GROSS, Warren J.: FQRNT, Team Research Grant, Technologies avancées pour les réseaux d'interconnexions écoénergétiques dans les centres de traitement de l'information, O. Liboiron-Ladouceur (principal) and W. Gross (Apr 2011-Mar 2014, \$182100-50%)
- GROSS, Warren J.: FQRNT, Team Research Grant, (April 2008 - March 2011) Ultra Wideband Wireless Technologies for Asset Identification and Tracking, I. Psaromiligkos (principal) and two others. (extended) (Apr 2008-Mar 2012, \$195800-33%)
- GROSS, Warren J.: National Science Foundation (NSF), Cyber-Enabled Discovery and Innovation, Realizing the Ultimate Potential of List Error-Correction: Theory, Practice and Applications. A. Vardy (principal) (UCSD) and 3 others. (Oct 2008-Aug 2011, \$349591-0%)
- GROSS, Warren J.: National Science Foundation, Comm. and Information Foundations, Polar Codes -- From Theory to Practice . A. Vardy (principal) (UCSD) and W. J. Gross (Sep 2011-Aug 2014, \$499981-0%)
- GROSS, Warren J.: CFI, Infrastructure Operating Fund, An Integrated Computing Platform for Enabling Innovation in Signal Processing and Scientific Computing, R. Rose (principal) and W. J. Gross. (Oct 2006-Sep 2012, \$69702-50%)
- JOOS, Geza: NSERC Wind Energy Strategic Network. L. Chang (principal, UNB), 40 others (Apr 2008-Mar 2013, \$5000000-5%)
- JOOS, Geza: NSERC, Smart Microgrid Strategic Network, H. Farhangi (principal, BCIT), 9 others (Oct 2010-Sep 2015, \$4622000-17%)
- JOOS, Geza: NSERC, Strategic Grant, Distributed energy-aware information infrastructure: a path to robust and sustainable IT, T. Le-Ngoc (principal, McGill University), 5 others (Nov 2009-Oct 2012, \$531000-17%)
- JOOS, Geza: NSERC, Strategic Grant, Fiber-wireless access sensor networks and new communications paradigms for a future low carbon society of e-mobility and smart microgrids, M. Maier (principal, INRS), 5 others (Nov 2011-oct 2014, \$431000-15%)
- JOOS, Geza: Auto21 NCE, Infrastructure for wide market adoption of PHEV, E. Bibeau (principal, Manitoba), 3 others (Jan 2011-Dec 2012, \$160000-30%)
- KIRK, Andrew: FQRNT, Regroupement Strategique (2006-2010), Centre pour les systèmes et technologies avancés en communications" (SYTACom), D.V. Plant (PI) & 50 others (apr 2009-Mar 2013, \$2068000-2%)
- KIRK, Andrew: FQRNT Arbora-Nano program (2010-13), Encre à base de nano cellulose cristalline pour une sécurité et une couleur, M.Andrews (PI), A.G.Kirk and 2 others (Apr 2010-Mar 2013, \$200000-33%)
- KIRK, Andrew: Genome Quebec (2010-2013), Towards a Portable and Fully Automated SPR-Based Digital Microfluidics Array Platform Integrating Diffractive Optical Elements for Genomics and Proteomics, Tabrizian, M.T. (PI); Kirk, A.G.; Juncker, D; Veres, T (Apr 2010-Mar 2013, \$530000-25%)
- KIRK, Andrew: NSERC, CREATE Training Program in NeuroEngineering, Lennox, Bruce (PI) and 9 others (Apr 2011-Mar 2015, \$1650000-5%)
- LABEAU, Fabrice: FQRNT, Regroupements Strategiques, Centre de de Recherche sur les Systèmes et Technologies Avancés en Communications (SYTACom). D. Plant (principal) and 26 others (Apr 2004-Mar 2011, \$1944000-4%)

- LABEAU, Fabrice: FQRNT, Regroupements Strategiques, Centre de de Recherche sur les Systèmes et Technologies Avancés en Communications (SYTACom). D. Plant (principal) and 49 others (Apr 2011-Mar 2017, \$2736000-2%)
- LABEAU, Fabrice: NSERC, Strategic Grant, Distributed Energy-Aware Information Infrastructure: A Path to Robust and Sustainable IT, T. Le-Ngoc (principal) and 5 others (Nov 2010-Oct 2013, \$708000-14%)
- LABEAU, Fabrice: McGill University VP RIR, Centre de Recherche, (Apr 2004- Mar 2010) Centre de de Recherche sur les Systèmes et Technologies Avancés en Communications (SYTACom). D. Plant (principal) and 12 others (Apr 2004-mar 2011, \$510000-7%)
- LABEAU, Fabrice: NSERC, Strategic Research networks (Jan 2009- Jan 2013), Healthcare Support through Information Technology Enhancements (hSITE). David Plant and 15 others. (Jan 2009-Jan 2013, \$4763960-6%)
- LABEAU, Fabrice: MDEIE Programme de soutien à la recherche, volet : Soutien à des initiatives internationales de recherche et d'innovation, Techniques de transmission avant-gardistes pour les communications multimédia, L. Szczecinski (principal) and F. Labeau (Sep 2010-Oct 2013, \$150000-50%)
- LABEAU, Fabrice: Conseil Franco-Quebecois de Collaboration Universitaire (CFQCU), Partenariat stratégique en matière d'enseignement et de recherche (2011-2012), Technologies de transmission avant-gardistes pour les communications multimédias, L. Szczecinski (Principal) and F. Labeau (Sep 2011-Aug 2012, \$21400-50%)
- LABEAU, Fabrice: PROMPT-Québec Special Projects, Healthcare Support through Information Technology Enhance-ments (hSITE), Mark Coates and 5 others (Dec 2008-Dec 2013, \$531230-16%)
- LABEAU, Fabrice: FQRNT (projet de recherche en équipe) Communications coopératives et opportunistes pour l'amélioration de la capacité et de la fiabilité dans les réseaux sans fil Z. Dziong and 3 others (May 2010-Apr 2013, \$168000-25%)
- LABEAU, Fabrice: FQRNT (projet de recherche en équipe) Les transmetteurs et récepteurs pour la diffusion vidéo L. Szczecinski and 2 others (May 2010-Apr 2013, \$141000-33%)
- LE-NGOC, Tho: NSERC Collaborative R&D Grant (2009-2011), Adaptive Space-Time Precoding and Signal Processing for Cooperative Wireless Networks (with InterDigital Canada), PI: Champagne, Benoit; Le-Ngoc, Tho) (Oct 2009-Sep 2011, \$132000-50%)
- LE-NGOC, Tho: FQRNT Team Grant, Communications coopératives et opportunistes dans les réseaux sans fil, (PI:Dziong, Zbigniew; Tho Le-Ngoc, Fabrice Labeau, Francois Gagnon) (Apr 2010-Mar 2013, \$168000-20%)
- LE-NGOC, Tho: NATEQ, Regroupements stratégiques, Centre for Advanced Systems and Technologies in Communications, (PI : David Plant, and 43 Co-I) (Apr 2011-Mar 2017, \$2736000-0%)
- LE-NGOC, Tho: PROMPT-Quebec, hSite : Healthcare Support Through Information Technology Enhancements, (PI: Mark Coates, Fabrice Labeau, Tho Le Ngoc, David Plant, Milica Popovich, Leslie Rusch) (May 2011-Apr 2014, \$255000-15%)
- LE-NGOC, Tho: NSERC Strategic Research Network, Healthcare Support through Information Technology Enhancement (hSITE), (PI: David Plant, and about 15 Investigators) (Oct 2008-Sep 2013, \$4250000-12%)
- LE-NGOC, Tho: NSERC Collaborative R&D Grant (2009-2011), Location-assisted Clinical Communications (with Bell Canada), PI: Fabrice Labeau; Le-Ngoc, Tho; B. Segal; C. Truman; D.M. Doran) (Apr 2009-Mar 2011, \$145835-15%)
- LE-NGOC, Tho: PROMPT-Quebec (09-11): Allocation et gestion de ressources dynamiques : méthodes pratiques et multi-couches , (PI: Fabrice Labeau, Tho Le Ngoc, Mustafa Mehmet Ali) (Apr 2009-Dec 2011, \$170000-25%)

- LE-NGOC, Tho: MDEIE Quebec-China (10-13) Wireless e-health and key supporting technologies/ e-Santé sans-fil et technologies habilitantes (PI: Fabrice Labeau; Tho Le Ngoc, Guixia Kang, Zhiyong Feng, Xiongyan Tang) (May 2010-Apr 2013, \$142700-15%)
- LE-NGOC, Tho: NSERC Strategic Research Network, Smart Applications on Virtual Infrastructure (SAVI) (PI:Leon-Garcia, Alberto , U o T; and 15Co-I) (Jan 2012-Dec 2016, \$5000000-6%)
- LE-NGOC, Tho: NSERC Strategic Research Network, NSERC Smart Microgrid Network (NSMG-Net) (PI:Farhangi, Hassan , and 9 Co-I) (Oct 2010-Sep 2015, \$3697500-9%)
- LIBOIRON-LADOUCEUR, Odile: Italian Ministry of Foreign Affairs, Executive Program of Technology Co-Operation Italy & Quebec. Réseaux Optiques D'Interconnection extensible haute efficacité énergétique pour équipement informatique à large bande passante (RODIN). N. Andriolli (principle, SSSUP Italy) and O. Liboiron-Ladouceur (Jan 2011-Dec 2013, \$240000-10%)
- LOWTHER, David A.: NSERC Collaborative Research and Development Grant (2009-2012), "Investigating Traction Systems for Lunar Rover Mobility", P.H. Radziszewski (Principal) D. Lowther, V. Thomson, D. Pasini, Collaborators: Canadian Space Agency, Neptec Design Group Ltd. (Jun 2009-Jun 2012, \$829230-10%)
- MI, Zetian: NNSERC, Strategic Grant, Novel I-III-VI and III-V Based Solar Cells with Enhanced Energy Conversion Efficiency. I. Shih (principal) and Z. Mi (Oct 2008-Sep 2011, \$375000-50%)
- MI, Zetian: NSERC, Strategic Network, Photovoltaic Innovation Network, R. Kleiman (principal), Z. Mi and 27 others (Apr 2010-Mar 2015, \$5000000-3%)
- MI, Zetian: NSERC, Strategic Network, Innovative Green Wood Fibre Products, T. van de Ven (principal), Z. Mi, R. Hill and 18 others (Apr 2010-Mar 2015, \$5000000-7%)
- MI, Zetian: NSERC, Strategic Grant, Direct Integration of Microtube Lasers on Silicon, , A. Kirk (principal), Z. Mi, and D. Plant (Oct 2009-Sep 2012, \$408900-33%)
- MI, Zetian: FQRNT, Team Grant, Advanced Quantum Dot and Nanowire Heterostructures: Nanoscale-Patterned Growth, Characterization and Device Applications, , R. Ares (principal), Z. Mi and D. Drouin (Apr 2010-Mar 2013, \$150000-33%)
- MI, Zetian: FQRNT Materials Center (RQMP), FQRNT Regroupement Stratégique, P. Grutter (principal), H. Guo, Z. Mi and 60 others (Apr 2010-Mar 2014, \$900000-1%)
- MI, Zetian: FQRNT, Team Grant, Fermions de Majorana dans des heterostructures semiconductrices, G. Gervais (principal), Z. Mi and T. Szkopek (Apr 2011-Mar 2014, \$205248-33%)
- MI, Zetian: FQRNT, INTRIQ, Epitaxial Growth of 1.55 μm In(Ga)N Nanoscale Heterostructures on Si, T. Szkopek (principal), Z. Mi, and H. Guo (Aug 2011-May 2012, \$30000-33%)
- PLANT, David V.: NSERC Strategic Grant, Extending the reach of high bit rate UWB-from FTTH to household LAN; L.A.Rusch (PI, U. Laval), D.V.Plant, and s. LaRochelle (U.Laval); supporting organization TELUS (Oct 2008-Mar 2012, \$455000-33%)
- PLANT, David V.: NSERC Strategic Grant, Direct Integration of Microtube Lasers on Silicon; A.G. Kirk (PI), D.V.Plant, and Z. Mi; supporting organization : Reflex Photonics (Oct 2009-Sep 2012, \$408000-15%)
- PLANT, David V.: NSERC Collaborative research and Training Experience (CREATE), Next Generation Optical Networks; S. Yam (PI)Queen's), D.V.Plant, and four others; supporting organization: Ciena, CMC Microelectronics (Apr 2011-Mar 2017, \$1650000-17%)
- PLANT, David V.: PROMPT Quebec: Ultra-High Bit Rate Optical Transport and Access Networks; D.V. Plant (PI) and 3 others; supporting organization: Bell Canada (Jan 2010-Dec 2012, \$288000-17%)
- POPOVIC, Milica: PROMPT Quebec Major projects: hSITE: Healthcare Support through Information Technology Enhancements (PI)M. Coates, Co-Pis: D. V. Plant, T. Le-Ngoc, F.Labeau, M. Popovich (Jul 2011-Jul 2014, \$276230-5%)
- RABBAT, Michael: MITACS, Project Grant, Fusion and Inference in Surveillance Networks. M Coates (principal), F Ferrie, M Rabbat, N de Freitas (UBC), A Doucet (UBC), and T Kirubarajan

- (McMaster). Supporting Organizations: OODA Technologies and Defence Research and Development Canada (Valcartier) (Apr 2008-Mar 2011, \$370000-16%)
- RABBAT, Michael: NIH, Exploratory/Developmental Grant, A New Informatics Paradigm for Reconstructing Signaling Pathways in Human Diseases. D Zhu (principal - U New Orleans), O Sartor (Tulane Cancer Research Center), and M Rabbat. (Jul 2009-Jun 2011, \$400000-7%)
 - ROCHETTE, Martin: FQRNT, Equipe program, Resonator devices made of chalcogenide glasses. (May 2010-Apr 2013, \$168526-60%)
 - SHIH, Ishiang: NSERC Photovoltaic Network Network (with Z. Mi, PI McMaster R. Kleiman with ~ 17 others) (1/1/2010-31/12/2015, \$5000000-2%)
 - RABBAT, Michael: NSERC Strategic Project (PI Z. Mi, with H. Guo) Full Solar Spectrum InGaN Solar Cells (1/1/2009-31/12/2012, \$378000-32%)
 - SHIH, Ishiang: NSERC Strategic Project (PI Z. Mi, with H. Guo and G. Botton (McMaster)) Ultra High Efficiency P-free InGaN/GaN dot-in-a-wire white LEDs (1/1/2011-31/12/2014, \$453000-20%)
 - SZKOPEK, Thomas: NSERC, Collaborative Research Development Grant, (Apr. 2011 - Aug. 2014) Graphene-Sn nanocomposites for Li-ion battery anodes. M. Cerruti (principal) and T. Szkopek. Partner (GM Canada) contributes an *additional* \$25,910 per annum in-kind. (Apr 2011-Aug 2014, \$196200-50%)
 - SZKOPEK, Thomas: FQRNT, Équipe (May 2011 - April 2014) Fermions de Majorana dans des hétérostructures semiconductrices. G. Gervais (principal), Z. Mi and T. Szkopek. (May 2011-Apr 2014, \$101200-33%)
 - SZKOPEK, Thomas: FQRNT, Regroupements Strategique (May 2011 - April 2013), A. Tapp (principal) and twenty others including T. Szkopek. (Direct research support provided). (May 2011-Apr 2012, \$300000-15%)
 - SZKOPEK, Thomas: FQRNT, Équipe (May 2008 - April 2011) Quantum Hall Information, G. Gervais (principal), P. Hayden and T. Szkopek. (May 2008-Apr 2011, \$194000-25%)
 - SZKOPEK, Thomas: NSERC, CREATE (May 2010 - April 2015), Training program in integrated sensor systems. A. Kirk (principal), M. Chaker, V. Chodavarapu, P. Desjardins, D. Drouin, L. Frechette, P. Grutter, D. Juncker, R. Kashyap, and T. Szkopek. (May 2011-Apr 2015, \$1350000-0%)
 - SZKOPEK, Thomas: NanoQuebec, New Major Central Research Facilities (Oct 2012 - Sept 2014). P. Grutter (principal), M. Nannini, V. Chodavarapu, M. El-Gamal, G. Gervais, D. Juncker, A. Kirk, Z. Mi, W. Reisner, S. Vengallatore, and T. Szkopek. (Oct 2012-Sep 2014, \$280000-0%)
 - VU, Mai: NSERC Strategic Grant (October 2009 - September 2012) Distributed Energy-Aware Information Infrastructure: A Path to Robust and Sustainable IT. T. Le-Ngoc (principal), F. Labeau, H. Nguyen, G. Zoo, M. Vu, W. Gross. (Oct 2009-Sep 2012, \$708000-15%)
 - ZILIC, Zeljko: Québec Provincial Centers, Regroupement Stratégique en Microsystèmes du Québec, M. Sawan (PI/EPoly) and 34 others (Sep 1999-Aug 2015, \$8417650-4%)
 - ABHARI, Ramesh: CFI (Canada Foundation for Innovation)- Leading Edge Fund, Infrastructure, (June 2009-2013) Laboratories for Broadband Optical and Wireless Systems. David Plant (Principal Investigator), Ramesh Abhari and 8 other (Jun 2009-Jun 2013, \$13796399-0%)
 - BOULET, Benoit: Provost priority pool allocation, CIM renovations for multi-disciplinary research infrastructures, B. Boulet, CIM Director, PI. (May 2009-Sep 2013, \$132000-100%)
 - CHAMPAGNE, Benoit: FQRNT, Regroupements Stratégique "SYTACom – Centre for Advanced Systems and Technologies in Communications" D. Plant, B. Champagne and forty-eight (48) others (apr 2011-Mar 2017, \$2736000-2%)
 - CHAMPAGNE, Benoit: FQRNT, Regroupements Stratégique "SYTACom – Centre for Advanced Systems and Technologies in Communications" D. Plant, B. Champagne and twenty-three (23) others (Apr 2004-Mar 2011, \$1750000-4%)

- COATES, Mark J.: Canadian Foundation for Innovation (CFI), Leading Edge Fund, Laboratories for Broadband Optical and Wireless Systems (LBOWS). D. Plant (principal) and 9 others. (Jun 2009-Jun 2013, \$5518560-4%)
- COOPERSTOCK, Jeremy R.: FQRNT, Regroupement Stratégique: l'Étude des Environnements PARTagés Intelligents répartis (REPARTI). D. Laurendeau (principal) and 23 others. \$100,000 per annum allocated to CIM. (1/1/2006-1/1/2012, \$1530000-0%)
- COOPERSTOCK, Jeremy R.: FQRNT/FQRSC, Regroupement Stratégique: Centre Interdisciplinaire de Recherche en Musique, Médias et Technologie (CIRMMT). S. McAdams (principal) and 23 others. (1/1/2008-1/1/2014, \$1800000-0%)
- EL-GAMAL, Mourad N.: NanoQuebec Operating Funding Competition: McGill Nanotools Microfab. Investigators: Peter Grutter, Mourad El-Gamal, and 8 others (1/1/2011-1/1/2013, \$280000-10%)
- GROSS, Warren J.: Xilinx, Equipment Donation, Stochastic Chase Decoding of Reed-Solomon Codes, W. Gross 2011-2012 (Jun 2011-Jul 2011, \$6499-100%)
- GROSS, Warren J.: Altera Corp, Equipment Donation, Hardware Platform for Low Bit-Error-Rate Evaluation of Decoders, W. Gross (Jan 2011-dec 2011, \$7995-100%)
- GROSS, Warren J.: Compute Canada (CLUMEQ) CPU time grant, Monte-Carlo Simulation of Stochastic Iterative Error-Correcting Decoders, W. Gross. (Jan 2011-Dec 2011, \$89600-100%)
- KIRK, Andrew: NSERC, Research Tools and Instruments, Electron beam deposition system for multi-user nanofabrication facility, A.Kirk (PI) and 9 others (Apr 2011-Mar 2012, \$148200-20%)
- LIBOIRON-LADOUCEUR, Odile: FQRNT, Établissement de nouveaux chercheurs - Equipment. Interface optique transparente à basse puissance et très grande bande passante pour les communications de données à haut débit binaire. O. Liboiron-Ladouceur (Principal) (Apr 2009-Dec 2011, \$36300-100%)
- LIBOIRON-LADOUCEUR, Odile: CFI, Leaders Opportunity Fund, Low-Power Photonic Interconnects for Data Centre. O. Liboiron-Ladouceur (Principal) (Apr 2009-Nov 2011, \$430000-100%)
- LIBOIRON-LADOUCEUR, Odile: Reflex Photonics, Development of Optically Enhanced Interconnectivity for Computing Platforms. O. Liboiron-Ladouceur (Principal). Reflex Photonics (supporting organization) (Apr 2011-Mar 2012, \$5000-100%)
- LIBOIRON-LADOUCEUR, Odile: NSERC, Research Tools and Instrument Category 1, Electron Beam Deposition System for Multi-User Nanofabrication Facility, A. Kirk (principal), O. Liboiron-Ladouceur (co-applicant), and 12 others (apr 2011-may 2011, \$148200-11%)
- LIBOIRON-LADOUCEUR, Odile: CMC Microsystems, Manufacturing Resources for OpSIS/IME Silicon Photonics Technology. A Monolithic Optical Front-end for Soft-decision Decoders. O. Liboiron-Ladouceur (Principal) (Oct 2011-May 2012, \$18000-100%)
- MI, Zetian: NSERC, RTI, Equipment for the Development of Nitride-Based Nanoscale Electronic, Photonic, and Biosensing Devices on a Silicon Platform, Z. Mi (principal) and 8 others (Apr 2010-Mar 2011, \$113115-100%)
- MI, Zetian: NSERC, RTI, Equipment for Developing Advanced Nanophotonic Devices for Applications in Green Fibre Network, Photovoltaics, Solid State Lighting, and Quantum Computing, Z. Mi (principal) and 13 others (Apr 2011-Mar 2012, \$129863-100%)
- MI, Zetian: NSERC, RTI, Electron Beam Deposition System for Multi-User Nanofabrication Facility, A. Kirk (PI), Z. Mi and 12 others (Apr 2011-Mar 2012, \$148200-0%)
- MUSALLAM, Wissam Sam: NSERC RTI. Real Time Controllers for Brain Machine Interfaces. (Apr 2011-Apr 2012, \$97044-100%)
- PLANT, David V.: Canadian Foundation for Innovation (CFI) Call 6, Infrastructure: Laboratories for Broadband Optical and Wireless Systems (LBOWS). D. Plant (principal) and 9 others. (Jun 2010-May 2015, \$13796399-25%)

- PLANT, David V.: Canadian Foundation for Innovation (CFI) Call 6, CFI contribution to Infrastructure Operating Funds (IOF): Laboratories for Broadband Optical and Wireless Systems (LBOWS). D. Plant (principal) and 9 others. (Jun 2010-May 2015, \$541718-100%)
- PLANT, David V.: Canadian Foundation for Innovation (CFI) Call 6, McGill Contribution to Infrastructure Operating Funds (IOF) Laboratories for Broadband Optical and Wireless Systems (LBOWS). D. Plant (principal) and 9 others. (Jun 2010-May 2015, \$515261-100%)
- RABBAT, Michael: CFI, Leaders Opportunity Fund, Laboratory for Networked Information Processing Systems, M. Rabbat (Principal) (Sep 2008-Aug 2013, \$300000-100%)
- RABBAT, Michael: CFI, Infrastructure Operating Fund, Laboratory for Networked Information Processing Systems, M. Rabbat (Principal) (Sep 2008-Aug 2013, \$24000-100%)
- RABBAT, Michael: CFI, Leading Edge Fund (Oct 2008- Sep 2013) Laboratory for Broadband Optical and Wireless Systems. D. Plant (PI) and 26 others. (Oct 2010-Aug 2015, \$14000000-4%)
- ROBERTS, Gordon: National Microelectronics and Photonics Testing Collaboratory (B. Barge, G. Roberts and others, CFI) (1/1/2004-1/1/2012, \$25000000-10%)
- ROCHETTE, Martin: CFI, Leaders opportunity funds, Nonlinear signal processing infrastructure (Apr 2007-Mar 2012, \$701480-100%)
- SZKOPEK, Thomas: NSERC, Research Tools and Instruments, (2011). Equipment for Developing Advanced Nanophotonic Devices for Applications in Green Fibre Network, Photovoltaics, Solid State Lighting, and Quantum Computing. Z. Mi (principal), T. van de Ven, R. Hill, X. Sun, H. Guo, T. Szkopek, G. Gervais, I. Shih, Q. Chen, G. Demopoulos, R. Ares, V. Aimez, S. Subhasis and P. Kambhampati. (Apr 2011-may 2011, \$129863-0%)
- VU, Mai: CFI Leader Opportunity Fund, (June 2010 -) Infrastructure for wireless network communications research, M. Vu (principal) (Jun 2010-jul 2011, \$300000-100%)
- ZILIC, Zeljko: CFI Leading Edge Fund, EMSYSCAN - Embedded Systems Canada, I. McWalter and 10 others (jun 2005-jun 2011, \$58460000-3%)
- ZILIC, Zeljko: CFI Leading Edge Fund, EMSYSCAN - Embedded Systems Canada, I. McWalter and 10 others (jun 2011-jun 2015, \$1719998-0%)

II-B ECE HONOURS, AWARDS AND PRIZES FOR THE PERIOD OF JANUARY 1ST, 2011 TO DECEMBER 31ST, 2011

BOULET, BENOIT:

- William Dawson Scholar

CAINES, PETER C:

- Fellow of the Institute of Mathematics and its Applications, Elected December 2011
- Life Fellow IEEE , January 2011

CHEN, LAWRENCE R.:

- Elected Fellow of the Optical Society of America, November 2011

CLARK, JAMES:

- Outstanding Reviewer Award, 2011 International Conference on Computer Vision (ICCV)

COOPERSTOCK, JEREMY:

- Voting Member, IEEE Communication Society Multimedia Communications Technical Committee (IEEE MMTC)
- Best Paper Award, Mobiquitous Conference, Copenhagen

FERRIE, FRANK:

- Canadian Image Processing and Pattern Recognition Society Award for Research Excellence and Service to the Research Community, May 2011

GIANNACOPOULOS, DENNIS:

- Best Student presentation Award (1st prize) for: “Redefining the Finite Element Method for multi-GPU processing”, by D.M. Fernandez, M. Mehri Dehnavi, W.J. Gross and D. Giannacopoulos, presented at the High Performance Computing Symposium (HPCS 2011), Montreal Canada, June 15-17, 2011.

GROSS, WARREN J:

- David Fernandez won Best Student Paper Award (1st Place) at the High Performance Computing Symposium June 15-17, 2011 (HPCS 2011)
- Camille Leroux won the Best Poster Award at a poster competition at ETS 2011 held on June 16, 2011

JOOS, GEZA:

- Canada Research Chair (CRC Tier 1) – 2004/01 to 2018/31 – renewed for 2011/01 to 2018/31
- NSERC Industrial Research Chair (IRC Senior Chair) – 2009/09 to 2014/08.

KIRK, ANDREW:

- James McGill Professor Award, McGill University, May 2011

LE-NGOC, THO:

- Fellow of the Institute of Electrical and Electronics Engineers (IEEE) 1997
- Fellow of the Engineering Institute of Canada (EIC), 2000
- Fellow of the Canadian Academy of Engineering (CAE), 2005
- Fellow of the Royal Society of Canada, 2010
- Distinguished Lecturer, IEEE Communications Society, 2008-2010

LEVINE, MARTIN:

- Named a Canadian Academy of Engineering Fellow 2011

LIBOIRON-LADOUCEUR, ODILE:

- Canadian Research Chair in Photonic Interconnects, Canada Research Chair Program, Tier II, June 2011
- Finalist of the Quebec-Italy Collaboration Award Premio Venezia awarded by the Italian Chamber of Commerce in Canada, December 2011

MAHAJAN, ADITYA:

- Peter Silvester Faculty Research Award, awarded by Electrical & Computer Engineering, February 2011

MEYER, BRETT:

- Chwang-Seto Faculty Scholar Award, awarded by the Faculty of Engineering, McGill, May 16, 2011

MI, ZETIAN:

- William Dawson Scholar Award, McGill University, 2011-2016

MUSALLAM, SAM:

- Canada Research Chair in BioEngineering
- CMC \$10,000 fabrication award.

PLANT, DAVID V.:

- IEEE Fellow,
- Optical Society of America Fellow,
- Canadian Academy of Engineering Fellow,
- Engineering Institute of Canada Fellow

ROBERTS, GORDON:

- James McGill Professor of Electrical & Computer Engineering, 2008-2114.
- Education Award, bourse d'enseignement en genie, Ministère du l'Éducation, du Loisir et du Sport, Quebec Government, 2009-2013.
- Best Presentation Award, A. Chowdhury and G. W. Roberts, "Performance Investigation Of A 1-Bit Periodic $\Sigma\Delta$ Phase-Signal Generator For Mixed-Signal Embedded Test, "Proceedings of the International Conference on Electronic Measurement & Instruments, Chengdu, China, August 2011.

ZENG, HAIBO:

- Best Paper award, IEEE Symposium on Industrial Embedded Systems (SIES), July 2011

ZILIC, ZELJKO:

- Senior Member of Association for Computing Machinery
- Invited Panelist at International Symposium on Multiple-Valued Logic, ISMVL, June 2011.
- Around 20 Media outlets brought recognition for our new course on multi-sensor integration: EETimes plus ~20 media outlets
- Winning award (first place) at Digikey iNEMO design competition for student group under my supervision for quadricopter design.

II-C ECE SCHOLARLY WORKS FOR THE PERIOD JANUARY 1ST, 2011 TO DECEMBER 31ST, 2011

(URL of publications : <http://www.mcgill.ca/ece/about/publications>)

For jointly authored papers, the bibliographic details appear only once; under the list of publications for co-authors, a reference to the first appearance of the publication is added.

II-C.1 ARTICLES IN REFEREED PUBLICATIONS:

ARBEL, TAL:

- [1] K. Murphy, D. De Nigris, D. L. Collins, T. Arbel, et. al., "Evaluation of Registration Methods on Thoracic CT: The EMPIRE10 Challenge", IEEE Transactions on Medical Imaging, Vol. 30, Issue 11, pp. 1901-1920, Nov. 2011.
- [2] M. Shah, Y. Xiao, N. Subbanna, S. Francis, D. L. Arnold, D. L. Collins, and T. Arbel, "Evaluating Intensity Normalization on MRIs of Human Brain with Multiple Sclerosis", Medical Image Analysis, Volume 15, Issue 2, pp. 267-282, April 2011.
- [3] C. Laporte and T. Arbel, "Learning to estimate out-of-plane motion in ultrasound imagery of real tissue", Medical Image Analysis, Volume 15, Issue 2, pp. 202-213, April 2011.

BAJCSY, JAN:

- [4] A. Garba and J. Bajcsy, "Optical Code Division Network Transmission with M-ary Chip Symbols," IEEE/OSA Journal of Optical Communications and Networking, vol. 3, issue 5, pp. 435-446, April 2011.

BOUFFARD, FRANCOIS:

- [5] Molina-Garcia, A., Bouffard, F. & Kirschen, D. S. (2011). Decentralized demand-side contribution to primary frequency control. IEEE Trans. Power Syst. 26(1). 411-419.

BOULET, BENOIT:

- [6] H. Azarnoush, S. Vergnole, B. Boulet, and G. Lamouche, "Real-time Control of Angioplasty Balloon Inflation Based on Feedback from Intravascular Optical Coherence Tomography: Preliminary Study on an Artery Phantom," IEEE Transactions on Biomedical Engineering, 10.1109/TBME.2011.2172685
- [7] V. Raissi Dehkordi and B. Boulet, Robust Controller Order Reduction, International Journal of Control, Vol. 84, No. 5, May 2011, pp. 985-997.

CAINES, PETER E.:

- [8] M. Nourian, R. P. Malhame', M.Y. Huang, P. E. Caines, "Mean Field (NCE) Formulation of Estimation Based Leader-Follower Collective Dynamics". Frank Lewis Festschrift edition of the International Journal of Robotics and Automation, Special Issue on New Advances in Nonlinear and Optimal Controls of Robotic and Autonomous Systems, Vol. 26, No. 1, 2011, pp. 120-129.
- [9] F. Taringoo, P. E. Caines, "Gradient geodesic and Newton geodesic HMP algorithms for the optimization of hybrid systems" (D. Q. Mayne Festschrift edition), Annual Reviews in Control, Volume 35, Issue 2, December 2011, pp.187-198

CHAMPAGNE, BENOIT:

- [10] G. Smecher (M.Eng.) and B. Champagne, "Optimum crossing-point estimation of a sampled random signal with a periodic carrier," Signal Processing, vol. 91, pp. 1951-1962, Aug. 2011.

- [11] E. Plourde (Ph.D.) and B. Champagne, "Multidimensional STSA estimators for speech enhancement with correlated spectral components," *IEEE Trans. on Signal Processing*, vol. 59, pp. 3013-3024, July 2011.
- [12] K. Hossain (M.Eng.) and B. Champagne, "Wideband spectrum sensing for cognitive radios with correlated subband occupancy," *IEEE Signal Processing Letters*, vol. 18, pp. 35-38, Jan. 2011.

CHEN, LAWRENCE R.:

- [13] M. Morsey-Osman, Q. Zhuge, L. R. Chen, and D. V. Plant, "Feedforward carrier recovery via pilot-aided transmission for single-carrier systems with arbitrary M-QAM constellations," *Optics Express*, vol. 19, no. 24, pp. 24331-24343 (2011).
- [14] M. Morsey-Osman, Q. Zhuge, L. R. Chen, and D. V. Plant, "Joint mitigation of laser phase noise and fiber nonlinearity for polarization-multiplexed QPSK and 16-QAM coherent transmission systems," *Optics Express*, vol. 19, no. 26, pp. B330-B336 (2011).
- [15] P. Muñoz, R. García-Olcina, C. Habib, L. R. Chen, X. J. M. Leijtens, J. D. Doménech, M. Rius, J. Capmany, T. de Vries, M. J. R. Heck, L. Augustin, R. Notzel, and D. Robbins, "Sagnac loop reflector and arrayed waveguide grating based multi-wavelength laser monolithically integrated on InP," *IET Optoelectronics*, vol. 5, no. 5, pp.207-210 (2011).
- [16] T. Huang, J. Li, J. Sun, and L. R. Chen, "Photonic generation of UWB pulses using a nonlinear optical loop mirror and its distribution over a fiber link," *IEEE Photonics Technology Letters*, vol. 23, no. 17, pp. 1255-1257 (2011).
- [17] M. Bolea, J. Mora, L. R. Chen, and J. Capmany, "Highly chirped reconfigurable microwave photonic filter," *IEEE Photonics Technology Letters*, vol. 23, no. 17, pp. 1192-1194 (2011).
- [18] T. Huang, J. Li, J. Sun, and L. R. Chen, "All-optical UWB signal generation and multicasting using a nonlinear optical loop mirror," *Optics Express*, vol. 19, no. 17, pp. 15885-15890 (2011).
- [19] P. Muñoz, R. García-Olcina, C. Habib, L. R. Chen, X. J. M. Leijtens, T. de Vries, D. Robbins, and J. Capmany, "Label swapper device for spectral amplitude coded optical packet networks monolithically integrated on InP," *Optics Express*, vol. 19, no. 14, pp. 13540-13550 (2011).
- [20] P. Samadi, L. R. Chen, C. L. Callender, P. Dumais, S. Jacob, and D. Celo, "RF arbitrary waveform generation using tunable planar lightwave circuits," *Optics Communications, Special Issue on Optical Pulse Shaping, Arbitrary Waveform Generation, and Pulse Characterization*, vol. 284, no. 15, pp. 3737-3741 (2011).
- [21] J. Li, T. Huang, and L. R. Chen, "Rational harmonic mode-locking of a fiber optical parametric oscillator at 30 GHz," *IEEE Photonics Journal*, vol. 3, no. 3, pp. 468-475 (2011).
- [22] K. Fouli, L. R. Chen, and M. Maier, "Time-, wavelength-, and code-domain optical reflection monitoring for next-generation access-metro networks," *Computer Communications*, vol. 34, no. 8, pp. 1011-1021 (2011)

CHODAVARAPU, VAMSY:

- [23] M. Hajj-Hassan, M. Khayyat-Kholghi, H. Wang, V. P. Chodavarapu, J. E. Henderson, "Response of Murine Bone Marrow-Derived Mesenchymal Stromal Cells to Dry-Etched Porous Silicon Scaffolds", *Journal of Biomedical Materials Research: A*, vol. 99A, pp. 269-274, 2011.
- [24] A. Hu and V. P. Chodavarapu, "Linearization of Oscillation Frequency for Integrated LC-VCO with Inversion-Mode Varactor", *Analog Integrated Circuits and Signal Processing*, vol. 68, pp. 307-314, 2011.
- [25] D. S. Daivasagaya, L. Yao, Ka Yi Yung, M. Hajj-Hassan, M. C. Cheung, V. P. Chodavarapu, and F. V. Bright, "Contact CMOS Imaging of Gaseous Oxygen Sensor Array", *Sensors and Actuators: B Chemical*, vol.157, pp. 408-416, 2011.
- [26] L. Yao, P. Lamarche, N. Tawil, R. Khan, A. M. Aliakbar, M. Hajj-Hassan, V. P. Chodavarapu and R. Mandeville, "CMOS Conductometric System for Growth Monitoring and Sensing of Bacteria", *IEEE Transactions on Biomedical Circuits & Systems*, vol. 3, pp. 223-230, 2011.

- [27] M. C. Cheung, P. J. R. Roche, M. Hajj-Hassan, A. G. Kirk, Z. Mi, V. P. Chodavarapu, "Controlling optical properties and surface morphology of dry etch xenon difluoride porous silicon, SPIE Journal of Nanophotonics, vol.5, iss. 1, art. 053503, 2011.
- [28] M. Hajj-Hassan, M. C. Cheung, V. P. Chodavarapu, "Ultra-thin Porous Silicon Membranes Fabricated using Dry Etching", IET Micro & Nano Letters, vol 6. iss.4, pp. 226-228, 2011.
- [29] L. Yao, K. Y. Yung, V. P. Chodavarapu, F. V. Bright, "CMOS Imaging of Temperature Effects of Pin-Printed Xerogel Sensor Microarrays", IEEE Transactions on Biomedical Circuits & Systems, vol. 5, iss. 2, pp. 189-196, 2011.

CLARK, JAMES J.:

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[C225] R. Ahmad and M. Rochette, "Bragg grating in sub-wavelength chalcogenide wires," at the OSA Specialty optical fibers (SOF), SOTuB4, Toronto, Canada, June (2011).
- [C226] R. Ahmad and M. Rochette, "Photosensitivity at 1550 nm and Bragg grating inscription in As₂Se₃ microwires for sensing applications," postdeadline presentation at the OSA Specialty optical fibers (SOF), SOWE1, Toronto, Canada, June (2011).
- [C17]
[C227] A. Al Kadry and M. Rochette, "Mid infrared sources based on the soliton self-frequency shift," at Photonics North, Proc. of SPIE Vol.8007 80070D, Ottawa, Canada, May (2011).

ROSE, RICHARD C.:

- [C228] Shirin Badiezadegan and Richard Rose. "A Performance Monitoring Approach to Fusing Enhanced Spectrogram Channels in Robust Speech Recognition". Proceedings of the International Conference on Speech Communication - InterSpeech 2011, Florence, August, 2011.
- [C229] Shirin Badiezadegan and Richard Rose. "A Comparison of Performance Monitoring Approaches to Fusing Spectrogram Channels in Speech Recognition" The International Machine Learning Society (IMLS) 2011 International Conference on Machine Learning, Bellevue Washington, June, 2011.
- [C230] Richard Rose, Shou-Chun Yin, and Yun Tang. "An investigation of subspace modeling for phonetic and speaker variability in ASR." Proceedings of the IEEE 2011 International Conference on Acoustics, Speech, and Signal Processing, Prague, May, 2011.
- [C231] Shirin Badiezadegan and Richard Rose. "A wavelet-based reconstruction approach to spectrogram reconstruction for robust speech recognition." Proceedings of the IEEE 2011 International Conference on Acoustics, Speech, and Signal Processing, Prague, May, 2011.

SHIH, ISHIANG:

- [C175]
[C232] C.H. Champness, H.F. Myers, I. Shih, "N-type Bridgman CuInSe_{2+x} by Addition of Sodium," 26th European Photovoltaic Solar Energy Conf., Hamburg, Sept. 5-9, 2011 p.p. 2832-2835.
- [C233] H.F. Myers, C.H. Champness, I. Shih, M. Sutton, "Sodium - Excess Selenium Interaction in Bridgman-grown CuInSe₂," 37th IEEE Photovoltaic Specialists Conf., Seattle, Washington, June 19-24, 2011.
- [C234] H.F. Myers, C.H. Champness, I. Shih, "Relation between Sodium Addition and Excess Selenium in Bridgman-grown CuInSe₂," Photonics North 2011, Ottawa, May 16-18, 2011, Proc. SPIE vol. 8007.

SZKOPEK, THOMAS:

- [C235] H.S. Skulason, H.V. Nguyen, A. Guermoune, M. Siaj, C. Caloz, and T. Szkopek, "High-Frequency Coplanar Waveguide Graphene Circuit Components on Low-Loss Dielectric Substrates", Graphene Technology: Production, Assembly and Applications, 12th International Conference on Science and Applications of Carbon Nanotubes, Cambridge, UK, 11-16 July 2011.
- [C236] S. Sabri, J. Guillemette, A. Guermoune, M. Siaj, and T. Szkopek, "CO₂ Sensitivity of Polyethyleneimine Coated Graphene Field Effect Transistors", Graphene Technology: Production, Assembly and Applications, 12th International Conference on Science and Applications of Carbon Nanotubes, Cambridge, UK, 11-16 July 2011.
- [C237] H.S. Skulason, H.V. Nguyen, A. Guermoune, M. Siaj, C. Caloz, and T. Szkopek, "High-Frequency Coplanar Waveguide Graphene Circuit Components on Low-Loss Dielectric Substrates", Graphene: the Road to Applications, Boston, 11-13 May 2011.

- [C238] P. Levesque, S. Sabri, C. Aguirre, J. Guillemette, M. Sij, P. Desjardins, T. Szkopek and R. Martel, "Probing Electrochemical Charge Transfer at Surfaces Using Graphene Transistors", 219th Electrochemical Society Meeting, Montréal, 4 May 2011.
- [C239] S.A. Imam, A. Guermoune, M. Sij, and T. Szkopek, "Large Area Graphene Field Effect Devices with Sputtered Nitride and Oxide Top-Dielectrics", Graphene 2011, ImagineNano, Bilbao, Spain, 11-14 April 2011.
- [C240] T. Szkopek and E. Ledwosinska, "Optical Frequency Conductance Model of TeraHertz/Infrared Emission and Detection in Semiconductors", Proc. SPIE, vol. 7938 (2011).

VU, MAI:

- [C241] M. Vu, "MIMO Capacity with Per-antenna Power Constraint," IEEE Conf. on Global Comm. (Globecom), Dec 2011.
- [C242] P. Zhong and M. Vu, "Decode-forward and Compute-forward Coding Schemes for the Two-Way Relay Channel," IEEE Information Theory Workshop, Oct 2011.
- [C243] F. Parzysz, M.Vu, F. Gagnon, "A Half-Duplex Relay Coding Scheme Optimized for Energy Efficiency," IEEE Information Theory Workshop, Oct 2011.
- [C244] "Compress-Forward without Wyner-Ziv Binning for the One-Way and Two-Way Relay Channels," [pdf] P. Zhong and M. Vu Forty-Ninth Annual Allerton Conference, Sept 2011.
- [C245] "A Half-Duplex Cooperative Scheme with Partial Decode-Forward Relaying," [pdf] A. Al Haija and M. Vu, IEEE Int'l Symposium on Info. Theory (ISIT), July 2011.
- [C246] "Throughput-Optimal Half-Duplex Cooperative Scheme with Partial Decode-Forward Relaying", [pdf] A. Al Haija and M. Vu, IEEE Int'l Conf. on Communications (ICC), June 2011.
- [C247] "Energy-Efficient Schemes for On-Demand Relaying," [pdf] F. Parzysz, M.Vu, F. Gagnon, The 34th IEEE Sarnoff Symposium, May 2011.
- [C248] "Joint Typicality Analysis for Half-Duplex Cooperative Communication," [pdf] A. Al Haija and M. Vu, The 12th Canadian Workshop on Information Theory (CWIT), May 2011.
- [C249] "On the Capacity of the Cognitive Z-Interference Channel," [pdf] M. Vaezi and M. Vu, The 12th Canadian Workshop on Information Theory (CWIT), May 2011.
- [C250] "Performance Analysis of Differential Chaotic Shift Keying Communications in MIMO Systems", G. Kaddoum, M. Vu and F. Gagnon, IEEE International Symposium on Circuits and Systems, May 2011.
- [C251] "On the Performance of Chaos Shift Keying in MIMO Communications Systems", G. Kaddoum, M. Vu and F. Gagnon, IEEE Wireless Communications and Networking Conf. (WCNC), Mar 2011.
- [C252] "Can Half-Duplex Be Simply Derived from Full-Duplex Communications?", [pdf] A. Al Haija and M. Vu, Workshop on Information Theory and Applications, UCSD, San Diego, Feb 2011.

WEBB, JONATHAN P.:

- [C253] A. Bostani, J. P. Webb, "A model-order reduction method for the passband and stopband characteristics of periodic structures", 41st European Microwave Conference Proceedings, Manchester, UK, October 10-13, 2011.

ZENG, HAIBO:

- [C254] Haibo Zeng and Marco Di Natale. Mechanisms for Guaranteeing Data Consistency and Time Determinism in AUTOSAR Software on Multi-core Platforms. In Proceedings of the IEEE Symposium on Industrial Embedded Systems (SIES), July 2011.
- [C255] Marco Di Natale and Haibo Zeng. Task Implementation and Schedulability Analysis of Synchronous Finite State Machines. In Work-in-Progress session, IEEE Real-Time and Embedded Technology and Application Symposium (RTAS), April 2011.
- [C256] Chung-Wei Lin, Marco Di Natale, Haibo Zeng, and Alberto Sangiovanni-Vincentelli. Performance Analysis of Synchronous Models Implementations on Loosely Time-Triggered Architectures. In Work-in-Progress session, IEEE Real-Time and Embedded Technology and Application Symposium (RTAS), April 2011.

- [C257] Arkadeb Ghosal, Paolo Giusto, Prakash Peranandam, Purnendu Sinha, and Haibo Zeng Metrics for Quantifying and Evaluating Ability of Electronic Control System Architectures to Accommodate Changes. In SAE World Congress, April 2011.
- [C258] Haibo Zeng and Marco Di Naale. Efficient Implementation of AUTOSAR Components with Minimal Memory Usage. In Workshop on Synthesis and Optimization Methods for Real-time Embedded Systems, in conjunction with the 32nd IEEE Real-Time Systems Symposium (RTSS), December 2011.

ZILIC, ZELJKO:

- [C259] Z. Zilic and K. Radecka, "Fault Tolerant Glucose Sensor Readout and Recalibration", Proceedings of Wireless Health Conference, WH2011, Oct. 2011. doi>10.1145/2077546.2077585 (conference acceptance ratio: 36%)
- [C260] MH. Neishaburi and Z. Zilic, "A Fault Tolerant Hierarchical Network on Chip Router", Proceedings of IEEE International Symposium on Defect and Fault Tolerance, DFT 2011, Oct. 2011, pp. 445-453.
- [C261] MH. Neishaburi and Z. Zilic, "Debug-aware AXI-based Network Interface", Proceedings of IEEE International Symposium on Defect and Fault Tolerance, DFT 2011, Oct. 2011, pp. 399-407.
- [C262] MH. Neishaburi and Z. Zilic, "Hierarchical Embedded Logic Analyzer for Accurate Root-Cause Analysis", Proceedings of IEEE International Symposium on Defect and Fault Tolerance, DFT 2011, Oct. 2011, pp. 120-128.
- [C263] Z. Zilic and B. Karajica, "High-level Design of Integrated Microsystems – Arithmetic Perspective", IEEE International Symposium on Robotics and Sensor Environments, ROSE2011, Sep. 2011, pp. 77-82.
- [C264] MH. Neishaburi and Z. Zilic, "Failure Rate Assessment Technique Using an Executable Model of the System", Proceedings of Euromicro Conference on Digital System Design, DSD 2011, August 2011, pp. 29-36.
- [C265] Z. Zilic and B. Karajica, "Teaching for Evolution Towards Embedded Multi-sensory Interfaces," Proceedings of IEEE International Conference on Microelectronics Systems Education, MSE'11, Jun. 2011, pp. 1-4. (This paper has earned the opening presentation slot, which even our awarded papers at the same conference have not achieved)
- [C266] MH. Neishaburi and Z. Zilic, "Shared Debugging Unit: An Infrastructure for Post-Silicon Validation", Proceedings of IEEE International VLSI Test Symposium, VTS 2011, May 2011, pp. 8-13.
- [C267] B. Mihajlovic and Z. Zilic, "Real-Time Address Trace Compression for Emulated and Real System-on-Chip Processor Core Debugging", Proceedings of IEEE Intl. Great Lakes Symposium on VLSI, GLVLSI 2011, May 2011, pp. 331-336. (conference acceptance ratio 28%)
- [C268] MH. Neishaburi and Z. Zilic, "On Post-Silicon Root-Cause Analysis and Debug using Enhanced Hierarchical Triggers", Proceedings of IEEE European Test Symposium, ETS 2011, May 2011, 6 pages. (conference acceptance rate: 27%),
- [C269] MH. Neishaburi and Z. Zilic, "Hierarchical Trigger Generation for Post-silicon", Proceedings of IEEE VLSI Design Automation and Test Conference, VLSI-DAT 2011, Apr. 2011, 4 pages.
- [C270] MH. Neishaburi and Z. Zilic, "Enhanced Reliability Aware NoC Router", Proc. Intl. Symposium on Quality Electronic Design, ISQED 2011, Mar. 2011, 6 pages.
- [C271] Y. Pang, K. Radecka and Z. Zilic, "An Efficient Hybrid Engine to Perform Range Analysis and Allocate Integer Bit-widths for Arithmetic Circuits", Proceedings of ACM/IEEE Asia and South Pacific Design Automation Conference, ASP-DAC 2011, Jan. 2011, pp. 455-460. (acceptance rate 34%: 102 papers out of 300; acceptance is lower for long papers like this one)
- [C272] J. Tong, D. Sarraf, M. Boule and Z. Zilic, "Generating Compact Assertions for Control-based Logic Signals", Proceedings of IEEE International Midwest Symposium on Circuits and Systems, MWSCAS2011, August 2011.
- [C273] H. Zarrabi, Z. Zilic, Y. Savaria and A. Al-Khalili, "On the Efficient Design and Synthesis of Differential Clock Distribution Networks", Chapter 17 in Book: VLSI, edited by Zhongfeng Wang, InTech Publishers, ISBN 978-953-307-049-0, Feb. 2011, pp. 331-352.

- [C274] B. Mihajlovic, Z. Zilic and K. Radecka, "Infrastructure for Testing Nodes of a Wireless Sensor Network", Book Chapter in Handbook of Research on Developments and Trends in Wireless Sensor Networks: From Principles to Practice, 2011. Edited by H. Jin and W-B. Jiang. 34 pages.

II-D. ECE INVOLVEMENT IN THE COMMUNITY

ABHARI, RAMESH:

- IEEE Press Board, IEEE Operation Center, NJ, USA, Member, 20 Hours
- IEEE 2012 International Microwave Symposium, Montreal, Canada, Member of technical program committee, 60 Hours

ARBEL, TAL:

- Natural Sciences and Engineering Research Council Canada (NSERC), Discovery Grant External Review Committee (2 grants), 8 hours.
- Natural Sciences and Engineering Research Council Canada (NSERC), Collaborative Health Research Projects Program (CHRP) External Review Committee (1 grant), 4 hours.
- Member of program committees for the following conferences:
 - 2011 Conference on Medical Image Computing Computer Aided Intervention (MICCAI), 8 hours.
 - 2011 International Conference on Computer Vision (ICCV), 10 hours.
 - 2011 IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR), 15 hours.
 - 2011 IEEE International Conference on Robotics and Automation (ICRA), 2 hours.
- Solomon Schechter Academy - Head of School Advisory Committee, Invited Member, 25 hours.
- Weizmann Institute Canada, Women and Science Committee, Member, 5 hours.

BAJCSY, JAN:

- Technical program committee member, 2011 Canadian Workshop on Information Theory, 8 hours
- Technical program committee member, 2011 IEEE Symposium on Personal, Indoor and Mobile Communications, 15 hours
- Technical program committee member, 2012 IEEE International Conference on Communications (Wireless Communications Symposium), 12 hours

BOUFFARD, FRANCOIS:

- IEEE Power and Energy Society, Chair (System Economics Subcommittee), 40 hours
- IEEE Power and Energy Society, Editor (IEEE Transactions on Power Systems), 110 hours
- NSERC - Strategic Grants Program - Energy Panel, Expert reviewer, 7.5 hours

BOULET, BENOIT:

- 2012 American Control Conference, Exhibits Chair (30 hours)
- IEEE, Senior Member (2007-, Member since 1992)
- IEEE Control Systems Society, Montreal Chapter, Member (2004-) (3 hours)
- OIQ, Member (1997-), Coaching of new applicants & junior engineers (4 hours)
- Corporation of Seven Wardens (iron ring ceremony), Master of Ceremony for the Iron Ring ceremony at ETS, Apr. 1, 2011. Alternate Warden, (8 hours)
- SIGBLOW/SIGFORM special interest groups in blow molding and thermoforming, NRC IMI, Member (2004-) (3 hours)

CAINES, PETER:

- Vice-Chair of the SIAG (SIAM Activities Group) on Control and Systems Theory, 2009 – 2011
- International Program Committee Member of meetings such as ADHS, IFAC Hybrid Systems Conference, to be held in Eindhoven, Netherlands, 2012.
- Member: International Federation of Automatic Control (IFAC) Technical Committee "Discrete Event and Hybrid Systems", 2009- 2011.
- Member of the EU Information Society Technologies Network of Excellence Review Committee for the HYCON-IST Project, 2005-2007, 2011 – present
- Detailed evaluations written for promotion and tenure cases for professorial staff at:
 - (i) University of Melbourne, Australia;
 - (ii) University of Cambridge, UK;
 - (iii) Georgia Institute of Technology, GA;
 - (iv) University of California, Santa Barbara, CA;
 - (v) University of Cyprus, Cyprus;
 - (vi) Carleton University, Ottawa.

CHAMPAGNE, BENOIT:

- Participation in Conference Organizing Committee:
 - Co-Chair, "Wide Area Cellular Communications Track," IEEE Int. Symposium on Personal, Indoor and Mobile Radio Communications, Toronto, Ontario, Sept. 2011 (60 hours).
 - Member, Technical Program Committee, "Transmission Technology Track," IEEE Int. Conf. on Vehicular Technology - Spring, Yokohama, Japan, May 2012 (8 hours).
 - Member, Technical Program Committee, "Wireless Communications Symposium," IEEE Int. Conf. on Communications, Tokyo, Japan, June 2011 (2 hours).
- Also reviewed several papers submitted to various scientific journals and international conferences in my professional area of expertise
- Evaluation Committee, Doctoral Scholarships in Information and Communications Technologies, Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT), Govt. of Quebec, Montreal, 2011 (8 hours).

CHEN, LAWRENCE:

- IEEE Photonics Society (formerly Lasers and Electro-Optics Society) Montreal Chapter (joint with Microwave Theory & Techniques and Antennas & Propagation Societies), Secretary/Treasurer, 6 hours.
- Technical Program Committee, 2011 IEEE Photonics Society Annual Meeting, Chair (Optical Networks and Systems Subcommittee), 15 hours.
- Technical Program Committee, 2011 Conference on Optical Fiber Communications, Member (Optical Processing and Analog Subsystems Subcommittee), 20 hours.
- Technical Program Committee, 2011 Asia Communications and Photonics Conference, Member (Passive Components and Fiber-Based Devices Subcommittee), 2 hours.

CHODAVARAPU, VAMSY:

- Reviewer: IEEE Engineering Medicine and Biology Symposium (EMBS) 10 Hours
- Reviewer: NSERC Strategic Grant 10 Hours
- Session Chair: SPIE Photonics West: BIOS 4 Hours
- Program Committee: SPIE Photonics West: BIOS 4 Hours

CLARK, JAMES:

- Senior Member of IEEE
- Member of program committees for the following conferences:
 - Canadian Conference on Computer and Robot Vision (CRV), 2011

- Conference on Energy Minimization Methods for Computer Vision and Pattern Recognition (EMMCVPR), 2011
- Computer Vision and Pattern Recognition (CVPR), 2011
- International Conference on Computer Vision (ICCV), 2011
- International Conference on Intelligent Robots and Systems (IROS), 2011
- Reviewer of proposals for NSERC (Strategic and Discovery Grant Programs) and the Austrian Science Fund.

COATES, MARK:

- Associate Editor, IEEE Trans. Signal Processing (Jan-Feb., 2011), (oversaw review process for 6 papers) 12 hours.
- Guest Editor: IEEE J. Special Topics in Signal Proc., Special Issue on Gossip Algorithms, (appeared Aug. 2011); 8 hours.
- Co-chair, Communications Track, Canadian Conference on Electrical and Computer Engineering 2011 and 2012: (identified associate editors and assigned reviewers, conducted and compiled reviews, ranked and made decisions about papers): 20 hours
- Program Committee, IEEE Int. Conf. Distributed Computing in Sensor Systems, (6 reviewed papers, 6 hours).
- Program Committee, Int. Conf. Networked Computing and Applications, (6 reviewed papers, 6 hours).
- Proposal/Tenure Application Reviews:
 - NSERC - Review of 3 Discovery Grant Application (Dec. 2011, 9 hours).
 - NSERC Gerhard Herzberg Award – 1 review (Sept. 2011, 5 hours).
 - Evaluation of Tenure Application for University of Utah (6 hours).
- Reviewing Activities: 11 journal papers; 17 conference papers (50 hours).
- Journals: Technometrics (1 paper); ACM/IEEE Trans. Networking (5 papers); IEEE Trans. Signal Processing (2 papers, 1 Tier-1 Accept/Reject Review); IEEE Aerospace & Electronics Systems Magazine (1 paper); Signal Processing (1 paper); J. Amer. Stat. Assoc. (1 paper);
- Conferences: Workshop on Computational Advances in Multi-Sensor Adaptive Processing (1 paper); Int. Conf. Networked Computing and Applications, (5 reviewed papers); IEEE Int. Conf. Distributed Computing in Sensor Systems (6 reviewed papers); Canadian Conference on Electrical and Computer Engineering (4 reviewed papers); Int. Conf. Artificial Intelligence and Statistics (1 reviewed paper);

COOPERSTOCK, JEREMY:

- Service to Professional Bodies:
 - Audio Engineering Society Journal, Associate Technical Editor, 8 hours
 - IEEE Communication Society Multimedia Communications Technical Committee (IEEE MMTC), 2 hours

EL-GAMAL, MOURAD:

- Chair - the Biomedical, Sensors, Displays, and MEMS subcommittee of the IEEE 2011 and 2012 Custom Integrated Circuits Conferences (CICC'11/12), sponsored by the IEEE Solid-State Circuits Society. [6.5 days: 2 x 2-day meetings + 2.5 preparation]
- Member of the Best Paper Committee - the 2011 IEEE Custom Integrated Circuits Conference (CICC'11). [1 days: papers evaluation]
- Member of the Board of Directors of the Centre de Recherche en Electronique Radiofréquence, CREER. This is an FQRNT center that coordinates the efforts of researchers in Quebec universities in the areas of radio frequency and millimeter-wave systems. [0.5 day].
- McGill's representative on the Board of Directors of the Regroupement Stratégique en Microélectronique du Québec, ReSMiQ. This is also an FQRNT center that coordinates the efforts of researchers in eight Quebec universities in the areas of Computer Architectures and Microelectronics. [0.5 day].

- Representative of McGill University's VP-RIR to the 2nd International Exhibition and Conference on Higher Education (IECHE) organized by Saudi Arabia's Ministry of Higher Education (April 2011), Riyadh, Saudi Arabia. [5 days]

FERRIE, FRANK:

- Served as external referee for tenure applications at Waterloo and Memorial and promotion at York.

GIANNACOPOULOS, DENNIS:

- IEEE Education Society Montreal Chapter, 3.0 hours.
- Ordre des Ingénieurs du Québec (OIQ) - prepared and submitted documents necessary for membership in OIQ, 16 hours.
- Professional Engineers Ontario (PEO) - prepared and submitted documents necessary for application to PEO, 24 hours.
- International Compumag Society Eighteenth Conference on the Computation of Electromagnetic Fields (Compumag'2011), Editorial Board Member, 11 hours (in 2011).
- NSERC Discovery Grant Review, 8 hours.
- Centre de Recherche En Electronique Radiofréquence (CREER) Executive Committee, Member, 10 hours.
- Completed French Courses and self study in order to pass french exam required for membership in OIQ, 160 hours.
- Took and passed Office Québécois de la langue française (OQLF) french exam required for membership in OIQ, 4 hours

GROSS, WARREN:

- Associate Editor, IEEE Transactions on Signal Processing, 24 hours.
- Secretary, IEEE Communications Society Data Storage Technical Committee, 12 hours
- Member, IEEE Signal Processing Society Design and Implementation of Signal Processing Systems Technical Committee, 12 hours
- Technical Program Co-Chair, IEEE Workshop on Signal Processing Systems (SiPS 2012), 6 hours.
- Chair, IEEE ICC'12 Workshop on Emerging Technologies in Data Storage, 10 hours.
- 2010 Data Storage Best Student Paper Award Committee Member, 2 hours
- Conference Technical Program Committees:
 - IEEE Globecom 2011 Selected Areas in Communications, Data Storage, 12 hours
 - IEEE Workshop on Signal Processing Systems (SIPS 2011), 12 hours.
 - IEEE ICC 2012 – Wireless Communications Symposium, 2 hours

JOOS, GEZA:

- Society Liaison, IEEE Press, IEEE Industry Applications Society
- Member, CanWEA (Canadian Wind Energy Association), Wind Energy Working Group
- Member, AQPER (Association Québécoise pour la production de l'énergie renouvelable), Wind Energy Working Group (Comité éolien)
- Member, Canadian Academy of Engineering, task force on upgrading the electricity grid; technical expert, Trottier Energy Futures Project
- Member, Board of Directors, Smart Grid Canada
- Member, Congrès des grands réseaux électriques (CIGRE), member of Study Committee C6, Distribution systems and distributed generation
- Associate Member, Centre for Energy Advancement through Technological Innovation (CEATI), Strategic Options Interest Group (SOIG), and utility interest group supporting R&D activities in renewable and alternate energy systems
- Member, IEEE PES Vision 2050, responsible for the chapter on power generation
- Chair, IEEE Power Engineering Society DC and FACTS Subcommittee of the Transmission and Distribution Committee, Working Group on the "Use of power electronics in major

grids for generation requirements" (WG 15.05.15), Organizer of a Panel Session on Wind Energy, 10 hours

- Vice-chair, IEEE Power Engineering Society Substation Committee, Working Group on "Voltage Sourced Converters" (WG I5), Involved in the tutorial on Voltage Sourced Converter and the development of a standard on STATCOMs, 15 hours
- Member, CIGRE (International Council on Large Electric Systems, membership from all countries, utilities, industries and universities), Study Committee C6 (Distribution systems and distributed generation), Working Group C6.22 (started August 2010), Microgrid evolution roadmap, in charge of the topic pertaining to Benefits and business case.
- Member, CIGRE (International Council on Large Electric Systems), Study Committee C6 (Distribution systems and distributed generation), Working Group C6.20 (started August 2010), E-Mobility, in charge of the topic pertaining to the Study of impacts on the distribution grid.
- Member, CIGRE (International Council on Large Electric Systems), Study Committee C6 (Distribution systems and distributed generation), Working Group C6.22 (completed August 2010), Planning and operation of active distribution networks, involved in Chapter 2, Survey results and definition (with Chad Abbey, HQ-IREQ and MEng student Rodrigo Hidalgo).
- Conference organization- International Electric Machines and Drives Conference (IEMDC 2011, May 2011), Member, Technical Committee
- Grant Review Expert/Committees: -
 - Reviewer, OEER (Marine energy, 2)
 - Reviewer, NSERC I2I (1), IRC (1)
 - Reviewer, CFI-LOF (2)
 - Reviewer, Grant proposal review, international (Chile, France)
- NSERC Wind Strategic Network- Outreach Committee, Chair - in charge of the network website, newsletter, annual general meeting of researchers, and other outreach activities
- NSERC Smart Microgrid Strategic Network- Outreach Committee, Chair - in charge of the network website, newsletter, annual general meeting of researchers, and other outreach activities
- Fellow, Institute of Electrical and Electronic Engineers (IEEE) – Member, Industry Applications Society, Power Engineering Society, Education Society, Power Electronics Society - support to fellowship applications
- Fellow, Canadian Academy of Engineering
- Fellow, Engineering Institute of Canada
- Member, American Association of Engineering Education (ASEE)
- Member, Association québécoise de la production d'énergie renouvelable (AQPER)
- Member, Corporation of the College Stanislas (private school, French Baccalaureate); Chair, Comité de verification

KHAZAKA, RONI:

- IEEE Student Branch Counselor 5hrs.
- Member of the board of Réseau des microsystemes du Quebec (Resmiq) - 6hrs.
- Member of the Executive Committee of of Réseau des microsystemes du Quebec (Resmiq) 1hr
- Member of the scientific committee of CREER research network - 1hrs.
- Member of Technical Program Committee of "Signal Propagation on Interconnects Conference"
- Member of the organizing committee of the 2012 International Microwave Symposium, 100hrs.
- Publication Co-Chair of the 2012 Canadian Conference on Electrical and Computer Eng, 15hrs.
- Publication Chair of the 2012 NEWCAS conference 10hrs.

KIRK, ANDREW:

- Optical Society of America, Fraunhofer Prize Committee (Chair) 8 hours
- IEEE Photonics Society, Meetings Council (member), 14 hours
- IEEE Photonics Society, Young Investigator Award Committee (member), 8 hours NSERC, Evaluation Group for Discovery Grant and Research Tools and Instruments Grants (member), 20 hours
- AeroMontreal, Board of Governors (member, representing the Principal), 4 hours

LABEAU, FABRICE:

- IEEE, Vehicular Technology Society, Board of Governors, member, 2011-Present, 50 hours
- IEEE, Sensors Council, Administrative Committee (Board of Governors), member, 2011-Present, 20 hours.
- IEEE, Vehicular Technology Society, Chapters committee, chair, 2011-Present, 40 hours
- IEEE, Vehicular Technology Society, Conference Committee, member, 2011-Present, 15 hours
- IEEE, Vehicular Technology Society, Distinguished Lecturers Program Coordinator and DL Committee, member, 2011-Present, 50 hours
- IEEE Montreal Section, Signal Processing Chapter co-chair, 2011-Present, 10 hours
- Conference and Workshop Organizing Committees:
 - IEEE Vehicular Technology Conference (2012 Fall), Technical Program co-chair, 50 hours
 - IEEE International Conference on Image Processing (2015), Technical Program co-chair, 10 hours
- Membership in Technical Program Committees (TPCs):
 - IEEE Canadian Conference on Electrical and Computer Engineering (CCECE 2012), Signal and Multimedia Processing Symposium co-chair, 5 hours
 - European Signal Processing Conference (EUSIPCO) 2011, Member of Technical Program Committee, 8 hours
- Agence Nationale de la Recherche (France), Jury des Instituts d'Excellence en Energies Decarbonees, member, 1er appel (Feb-Apr 2011) and 2eme appel (December 2011), 50 hours
- Fonds National de la Recherche Scientifique (Belgium), Grant reviews for equipment, postdoctoral and salary grants, 10 hours.
- Erasmus Mundus TRANS-DOC project studying the TRANSferability aspects of DOctoral training, McGill representative, 2010 - , 2 hours
- Institut National de la Recherche Scientifique, Energie Materiaux et Telecommunicaitons (INRS-EMT), Comité de Bourses d'exemption de frais majorés pour les étudiants étrangers, Member, 5 hours.

LEIB, HARRY:

- IEEE Transactions on Communications, Editor, 200 hours

LE-NGOC, THO:

- Editorial Board of the "EURASIP Journal on Wireless Communications and Networking", Member, 35 hours
- Editorial Board of the "Journal of Electrical and Computer Engineering", Member, 20 hours
- Technical Program Committee (of various conferences), Member, 20 hours

LIBOIRON-LADOUCEUR, ODILE:

- Montreal Chapter Chair of the IEEE Photonics Society (2010 - present) - Organization of seminars (meeting arrangement with other faculty members, lab tour, lunch), General

assembly meetings, Travel award establishment and reviewing committee chair, 50 hours.

- Local Organization Committee of the WPFOC, 2011, 20 hours.
- ABET Accreditation of US undergraduate programs in optics and photonics, SPIE/IEEE (2011), IEEE Photonics Society Representative, 15 hours of conference calls and administration.
- OFC/NFOEC 2012 Datacom and Computercom Subcommittee (2011 - present), 12 hours.
- IEEE Photonics Society Annual Meeting 2011, Nanophotonics Technical Committee (2011 - present), 12 hours.
- IEEE Photonics for switchings, (2011-present), 0.5 hour.

LOWTHER, DAVID A.:

- International Compumag Society, Vice-President for the Americas (elected), (30 hours)
- Institution of Engineering and Technology, Americas Regional Board, Member, (20 hours)
- Institution of Engineering and Technology, Montreal Branch Committee, Member, (8 hours)
- Electrical Engineering Visitor for Canadian Engineering Accreditation Board visit to British Columbia Institute of Technology, February 2011, (60 hours)
- IEEE Conference on Electromagnetic Field Computation Steering Committee, Member, (4 hours)
- International Conference on Electromagnetic Fields, Dalian, China, June 2012, Member of the International Steering Committee. (0 hours)

MCFEE, STEVE:

- International Compumag Society, Member, 2 hours.
- Montreal Regional Science Fair Judge, 5 hours.
- CEGEP (Marianopolis) Science & Technology Project mentor/advisor, 4 hours.

MEYER, BRETT:

- Technical Program Committee of the IEEE/ACM International Conference on Hardware/Software Codesign and System Synthesis, 20 hours

MI, ZETIAN:

- Co-Chair, IEEE Photonics Society 2011 Winter Topical Meeting on Photonic Materials and Integration Architectures, Keystone, CO, Jan. 10-12, 2011
- Co-Chair, Information Photonics Topical Meeting IP2011 on Photonic Integration, Ottawa, Canada, May 18-20, 2011
- Co-organizer, Symposium on Wide-Bandgap Semiconductor Materials and Devices of the 219th ECS Meeting, Montreal, Canada, May 1-6, 2011
- Associate Editor, IEEE/OSA Journal of Lightwave Technology, 2011/01 to present
- Guest Editor, IEEE Photonics Journal, 2011
- Guest Editor, Special Issue of Optical and Quantum Electronics on Photonics Integration, 2011
- Editor, Wide Bandgap Semiconductor Materials and Devices, ECS Transactions, vol. 35, Iss. 6, 2011
- 28th North American Conference on Molecular Beam Epitaxy, San Jolla, CA, Aug. 14-17, 2011.
- Nano-optics, Nanophotonics and Nano-Optoelectronics (TC-4) at 11th IEEE-NANO, Portland, Oregon, Aug. 15-10, 2011.

MICHALSKA, HANNAH:

- Reviewed 10 papers for ASME Journal of Dynamical Systems and Control, IEEE Control and Decision Conference, American Control Conference, (20 hours)

MUSALLAM, WISSAM (SAM):

- Society for Neuroscience, Member,
- Neural Control of Movement, Member,
- IEEE Biomedical Engineering, Member,
- Canadian Physiological Society, Member,

PLANT, DAVID V.:

- Member, OSA Board of Meetings, 10 hours.
- Technical Program Chair, 2011 IEEE Photonics Society Annual Meeting, 150 hours. I was responsible for the entire technical program of this 550 person annual conference.
- Member, IEEE Photonics Society Winter Topical Meeting, Photonic Integration Architectures, 5 hours.
- Sub-Committee Chair, Technical Program Committee, Optical Fiber Communications Conference (OFC), 100 hours
- Sub-Committee Chair, Technical Program Committee, Conference on Laser and Electro-Optics (CLEO), 20 hours
- Member, Technical Program Committee, IEEE Photonics Society Optical Interconnects meeting, 10 hours.
- Member, Technical Program Committee, International Topical Meeting on Information Photonics, 5 hours.
- Member, Scientific Advisory Committee PROMPT Quebec, 10 hours
- Chair, IEEE Photonics Society John Tyndall Award Committee, 10 hours.

POPOVIC, MILICA:

- Reviewing services for: IEEE Transactions on Biomedical Engineering (1 paper), International Journal of Biomedical Imaging (1 paper), Seventh International Conference on Intelligent Sensor, Sensor Networks and Information Processing (6 papers), Canada Engineering Conference (1 paper) , NSERC Discovery Grants Program (1 application) [Total hours: 40]
- IEEE Antennas and Propagation Society - reviewing services for: 1) Journals (IEEE Transactions on Antennas and Propagation, 2 paper reviews); 2) Student Design Contest and Graduate Research Scholarship applications (as a member of AP-S Education Committee) [Total hours: 20]
- International Microwave Symposium IMS 2012, to be held in Montreal, with estimated 12,000 participants, June 2012: member of the Local Arrangement Committee, participation in meetings and General Assembly meeting of the conference. [Total hours: 32]

PSAROMILIGKOS, IOANNIS:

- Technical Program Committee, Member, 2011 Canadian Conference on Electrical and Computer Engineering, 4 hours.
- Technical Program Committee, Member, 22nd IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (Sept. 2011), 10 hours.
- Technical Program Committee, Member, IEEE Vehicular Technology Conference - Spring (May 2012), 4 hours.
- Co-chair, IEEE Vehicular Technology Montreal Chapter, 3 hours.
- Reviewer, McGill Skillsets - Graduate Scholarships Consultation Session, 2 hours.

RABBAT, MICHAEL:

- 2011 IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS), Technical Program Committee, Vice-Chair (Signal Processing and Information Theory Track). 20 hours.

- 2012 IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS), Technical Program Committee, Chair. 10 hours.
- 2011 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Technical Program Committee, Member. 12 hours.
- 2011 IEEE International Workshop on Practical Issues in Building Sensor Network Applications (SenseApp), Technical Program Committee, Member. 10 hours.
- 2011 International Symposium on Algorithms for Sensor Systems, Wireless Ad Hoc Networks, and Autonomous Mobile Entities (ALGOSENSORS), Technical Program Committee, Member. 8 hours.
- 2011 Conference on Artificial Intelligence in Statistics (AISTATS), Technical Program Committee, Reviewer. 5 hours.
- 1 proposal reviewed for the US Army Research Office

ROBERTS, GORDON:

- Vice-Chair Planning, International Test Conference, 2011, 50 hours.
- Member of the Steering committee of the IEEE International Test Conference, 100 hours.
- Member of the technical program committee for the IEEE International Test Conference (ITC), Past Program Chair, 20 hours.
- Member of the technical program committee for the IEEE Custom Integrated Circuits Conference, Subcommittee Characterization, Test and Debug, 25 hours.
- Member of the analog signal processing committee for the IEEE Circuits and Systems Society, 10 hours.
- Reviewer for the following list of internationally recognized electrical engineering journals:
 - Transactions on Circuits and Systems, IEEE.
 - Proceedings on Circuits and Systems, IEE.
 - Design And Test Magazine, IEEE.
 - Electronic Letters, IEE.
 - International Symposium on Circuits and Systems (ISCAS), IEEE.
 - International Test Conference (ITC), IEEE.
 - Midwest Symposium on Circuits and Systems, IEEE.
 - Analog Integrated Circuits and Signal Processing, Kluwer Academic Publishers.
 - European Design & Test Conference.

ROCHETTE, MARTIN:

- Reviewer on grant applications:
 - NSERC, Discovery - 1 review (8 hours)
 - Canada Research Chair Program - 1 review (8 hours)

ROSE, RICHARD:

- Serving as Area Chair for the 2012 North American Association for Computational Linguistics (NAACL) 2012 Conference on Human Language Technology - (inviting reviewers, assigning submitted papers to reviewers, and organizing technical program for Spoken Language Processing Track)

SZKOPEK, THOMAS:

- Regroupement québécois sur les matériaux de pointe (FQRNT Regroupement Stratégique), Organizing Committee of the Grande Conférences, McGill Representative, 12 hours.
- Grant Application External Reviewer (NSERC Discovery, NSERC Strategic Projects, NSERC Collaborative Health Research Projects, BC Innovation Council, Canada Research Chair), 16 hours.

VU, MAI:

- TPC member for IEEE International Conference on Communications (ICC) 2012,
- TPC member for IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2011,
- TPC member for IEEE Global Conference on Communications (Globecom) 2011,
- TPC member for IEEE International Conference on Communications (ICC) 2011,
- TPC member for IEEE Canadian Workshop on Information Theory (CWIT) 2011

ZILIC, ZELJKO:

- CMC Microsystems (Canadian Microelectronics Corporation) - Technical Advisory Committee (TAC) member. The TAC, consisting of CMC executives, industry and association representatives and academia (only 3 in the year) provides strategic guidance on the direction of CMC Microsystems. Participated in a few focus group meetings to improve interaction between Universities and CMC.
- IEEE International High Level Design Validation and Test Workshop - General Chair (2011). Organized the committees and appointed various chairs, to assist in program, local arrangements, budget planning, the execution of the sponsorship plans. Helped to attract the donations from Intel, as well as coordinated financial transactions with IEEE Computer Society and the contractors to the meeting. For the first time, introduced the full program of tutorials, which was very well attended and helped the finances. In spite of the extremely challenging economic conditions, we managed to both augment the program, attract the best speakers and meet financial goals.
- IEEE International High Level Design Validation and Test Workshop - Program Chair (2010). While the conference has finished, I have worked to produce a special issue of IEEE Design and Test of Computers magazine devoted to this event, which was the highest level of technical content recognition received so far for the event.