# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>In This Issue</td>
<td>2</td>
</tr>
<tr>
<td>The 2012–2013 Council</td>
<td>3</td>
</tr>
<tr>
<td>President’s Message</td>
<td>4</td>
</tr>
<tr>
<td>Council Corner</td>
<td>6</td>
</tr>
<tr>
<td>Call for Nominations</td>
<td>7</td>
</tr>
<tr>
<td>2013 CORS Award of Merit</td>
<td>7</td>
</tr>
<tr>
<td>2013 CORS Service Award</td>
<td>7</td>
</tr>
<tr>
<td>2013 CORS Annual Conference, Vancouver, BC</td>
<td>9</td>
</tr>
<tr>
<td>2013 CORS Practice Prize Competition</td>
<td>11</td>
</tr>
<tr>
<td>Announcements</td>
<td>13</td>
</tr>
<tr>
<td>CORS Special Interest Groups</td>
<td>13</td>
</tr>
<tr>
<td>CORS SIG News</td>
<td>14</td>
</tr>
<tr>
<td>CORS Section News</td>
<td>15</td>
</tr>
<tr>
<td>Article</td>
<td>16</td>
</tr>
<tr>
<td>New Master’s Level Analytics Programs in Canada: Part 1</td>
<td>16</td>
</tr>
<tr>
<td>Meetings and Conferences</td>
<td>19</td>
</tr>
<tr>
<td>CORS Funding Opportunities</td>
<td>20</td>
</tr>
<tr>
<td>Graduate Student Conference Support Program (GSCS)</td>
<td>20</td>
</tr>
<tr>
<td>INFORMS Teaching Effectiveness Colloquium (for Faculty)</td>
<td>21</td>
</tr>
<tr>
<td>CORS Travelling Speakers Program</td>
<td>21</td>
</tr>
<tr>
<td>The Next Issue</td>
<td>22</td>
</tr>
<tr>
<td>CORS Bulletin Translation Policy</td>
<td>22</td>
</tr>
<tr>
<td>CORS Bulletin Advertising Policy</td>
<td>22</td>
</tr>
<tr>
<td>CORS ListServ</td>
<td>22</td>
</tr>
</tbody>
</table>
In This Issue

Dear CORS members,

With this issue we introduce two new features of the Bulletin. “Council Corner” will provide a timely update of recent discussions in, and motions passed by, the CORS Council. CORS SIG News will cover what’s happening in the Special Interest Groups within CORS. Be sure to review these two sections of the Bulletin for up-to-date news on what’s happening in the Society.

Also in this issue is the first of a series of articles on new master’s programs in analytics in Canadian universities. Check out how the Queen’s School of Business’s new degree program in this growing field compares against graduate programs in operational research.

Please take note of the Calls for Nominations for the 2013 CORS Award of Merit and the 2013 CORS Service Award, as well as information on the 2013 CORS Practice Prize. There is section news from the Toronto Student Chapter and the Calgary Chapter. Also note that hotel information for the 2013 CORS Annual Conference, to be held in Vancouver, is provided in this issue and is also available on the updated conference website: http://cors.forestry.ubc.ca.

Your articles are what make the CORS Bulletin the main source of news within the Canadian OR community. If you have ideas for future articles or features you would like to see in the Bulletin, please let me know.

Cheers,

Diane Bischak
Editor
The 2012–2013 Council

CORS Council is made up of the Officers of the Society, four Councillors, the Immediate Past President, a representative designated by each local section of the Society, and the Standing Committee Chairs. Contact information for 2012–2013 Council representatives is provided below. For a complete listing go to www.cors.ca.

President        Elkafi Hassini, McMaster University, hassin@mcmaster.ca
Vice-President    Corinne MacDonald, Dalhousie University, corinne.macdonald@dal.ca
Secretary         Dionne Aleman, University of Toronto, aleman@mie.utoronto.ca
Treasurer         Navneet Vidyarthi, Concordia University, navneetv@jmsb.concordia.ca
Past President    Samir Elhedhli, University of Waterloo, elhedhli@uwaterloo.ca
Councillor        Diane Bischak, University of Calgary, diane.bischak@haskayne.ucalgary.ca
Councillor        Jonathan Patrick, University of Ottawa, patrick@tefler.uottawa.ca
Councillor        Jennifer Percival, UOIT, jennifer.percival@uoit.ca
Councillor        Louis-Martin Rousseau, École Polytechnique de Montréal, louis-martin.rousseau@polymtl.ca
Atlantic          Claver Diallo, Dalhousie University, claver.diallo@dal.ca
Quebec            Irène Abi-Zeid, Université Laval, irene.abi-zeid@osd.ulaval.ca
Montreal          Louis-Martin Rousseau, École Polytechnique de Montréal, louis-martin.rousseau@polymtl.ca
Ottawa            Dragos Calitoiu, Bank of America, Ottawa, calitoiu@optimod.ca
Kingston          Jeffrey I. McGill, Queen's University, jmcmill@business.queensu.ca
Toronto           Joseph Milner, University of Toronto, milner@rotman.utoronto.ca
SW Ontario        Fredrik Odegaard, University of Western Ontario, fodegaard@ivey.uwo.ca
Winnipeg          Currently vacant
Saskatoon         Winfried Grassmann, University of Saskatchewan, grassman@cs.usask.ca
Calgary           Maurice Elliott, Husky Energy, maurice.elliott@huskyenergy.ca
Edmonton          Armann Ingolfsson, University of Alberta, armann.ingolfsson@ualberta.ca
Vancouver         Taranee Sowlati, University of British Columbia, taraneh.sowlati@ubc.ca
Toronto Student   Kimia Ghobadi, University of Toronto, kimia@mie.utoronto.ca
Waterloo Student  Tiffany Bayley, University of Waterloo, tamatuk@uwaterloo.ca
President’s Message

Dear CORS Members,

I would like to take this opportunity to share with you some of the major issues that are currently the subject of discussions by the Society’s Executive Council. In doing so, I hope to engage you in these discussions so that the Council can benefit from any feedback we can get from you. I will depart from the usual custom of reporting on all the Council motions, as you will find more details about Council activities in this issue in a new section called “Council Corner.”

At the AGM in Niagara Falls, in June 2012, I talked about the need to develop a strategy for having healthy and sustainable revenue sources for the Society on two fronts. First, by promoting and strengthening our annual conference through a stronger scientific program and sponsorship initiatives, recognizing that it is one of our major sources for sustaining the society’s finances. In this regard, I am happy to report that the 2012 conference has generated a net profit to CORS of almost $34,000. To support and improve our annual conference we are working on two initiatives. The conference program committee, which is constituted by the chair Corinne MacDonald (vice-president), Taraneh Sowlati (this year’s conference chair) and myself, has started working on a conference handbook where we document the different conference processes, relying on past organizing committee experiences. We hope this will help future organizing committees streamline their operations and focus more of their efforts on value adding activities. The other initiative is that the special interest groups (SIGs) will start playing an important role in the conference scientific program by organizing clusters in their area of interest. To date we have three SIGs: Forestry, Health Care Operations Research and Queueing Theory, and they are all expected to play an active role in this year’s conference in Vancouver. Whether you are part of a SIG or not I encourage you to play a role in this year’s conference by organizing sessions and/or presenting.

The second front for working towards sustainable revenues for the Society is by looking for a new framework for the publication of INFOR that would support the efforts of the Editor to promote the journal and at the same time curb its costs. In this regard a committee that includes Bernard Gendron (INFOR Editor and Publications Chair), Navneet Vidyarthi (CORS National Treasurer) and Jennifer Percival (Councillor) is looking at options for bringing INFOR to where it should belong: on the list of top OR journals that is also self-sustaining in terms of its finances. In addition to sending your manuscripts to INFOR, I encourage you to get in touch with the committee members and share your thoughts on how we can take INFOR to that level.

To help with these strategic issues and build continuity at the Society’s executive level, the council has created an ad hoc committee for “Strategic Planning.” This committee is chaired by Corinne MacDonald with other members being Bernard Gendron, Armann Ingolfsson and myself. One of the tasks of this committee is to develop a structure and terms of reference for the involvement of past presidents as advisors to the Executive Council.
Finally, I would like to thank Vinh Quan, who together with Armann Ingolfsson and Samir Elhedhli worked relentlessly on reviewing the Society’s Constitution to bring it up to date with the current Canada Not-for-profit Corporations Act. Among the benefits of these updates is the ability to use electronic voting for future constitution updates. These updates were approved by the membership (98% in favour) in late summer 2012. The Council is currently looking at three issues that may require some revisiting of the Constitution: (1) setting by-laws for the SIGs, (2) handling CORS Section shares of membership dues and conference profits and (3) defining and supporting student chapters. Stay tuned for more on these matters in the coming Bulletin issues.

Elkafi Hassini
Council Corner

This new section of the CORS Bulletin will highlight recent discussions by the CORS Council and motions of particular interest that have been passed.

- The CORS Bylaw and Constitution update has been completed. Council approved payment of $2500 to Baker & McKenzie LLP for legal assistance as well as preparation and filing of the Article of Continuance under the new Federal Not-for-profit Corporation Act. The Council thanked Vinh Quan for all his time, effort, and monetary expenses in managing the Constitution updates.

- Work has begun on the redevelopment of the CORS website. Council approved a website expense of $4509 to redesign all web forms and associated databases; to enable online payment through PayPal or similar system; to move the current website to a commercial host; and to integrate the new web forms with it.

- Formation of the CORS Health Care Operational Research Special Interest Group (HCOR) was approved by Council, with John Blake as founding president.

- Council approved a motion that all CORS student chapters have the name “CORS” in their title.

- Formation of the CORS Forestry Special Interest Group (FSIG) was approved by Council, with Gregory Paradis as founding president.
Call for Nominations

2013 CORS Award of Merit

Nominations are invited for the 2013 CORS Award of Merit. This award acknowledges significant contributions of a present or past member of CORS to the profession of Operational Research. Significant contributions can include:

- being specially recognized as an operational research practitioner,
- the development of a methodology relevant to the use of operational research,
- the supervision and development of operational research competence in others,
- the promotion of operational research in Canada through talks, presentations, articles, books, or by other means,
- service to CORS at either the national or local level.

Please submit nominations before **January 14, 2013** to:

Samir Elhedhli
Professor and CORS Past-President
Department of Management Sciences
University of Waterloo
Phone: 519-888-4567 ext. 35683
E-mail: elhedhli@uwwaterloo.ca

2013 CORS Service Award

If you know of anyone who has dedicated their time to CORS and who has a longstanding service record, please consider nominating him or her for the CORS Service Award. CORS National Council urges all local sections to consider and nominate its best candidates.

Nominations should include the candidate's name, activities, positions, and years of service. The nominating committee will evaluate the submissions and bring three to four names forward to Council for approval. Evaluations use a point system for guidance in assessing CORS-related activities. Previous winners are not eligible for additional service awards. A list of past CORS Service Award recipients may be found at: [http://www.cors.ca/en/prizes/i_service.php](http://www.cors.ca/en/prizes/i_service.php).

The point system is provided on the next page. As a guideline, winners should have 2000 or more points.

Please submit nominations before **March 1, 2013** to:

Corinne MacDonald
Associate Professor
Department of Industrial Engineering
Dalhousie University
E-mail: corinne.macdonald@dal.ca
Service Award Point System

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORS Council</td>
<td></td>
</tr>
<tr>
<td>President</td>
<td>500</td>
</tr>
<tr>
<td>Vice-President</td>
<td>350</td>
</tr>
<tr>
<td>Secretary</td>
<td>300</td>
</tr>
<tr>
<td>Treasurer</td>
<td>300</td>
</tr>
<tr>
<td>Councillor</td>
<td>250</td>
</tr>
<tr>
<td>Appointed</td>
<td>200</td>
</tr>
<tr>
<td>Past-President</td>
<td>150</td>
</tr>
<tr>
<td>International Conference</td>
<td></td>
</tr>
<tr>
<td>Conference Chair</td>
<td>350</td>
</tr>
<tr>
<td>Committee Chair</td>
<td>300</td>
</tr>
<tr>
<td>Committee Member</td>
<td>200</td>
</tr>
<tr>
<td>National Conference</td>
<td></td>
</tr>
<tr>
<td>Conference Chair</td>
<td>300</td>
</tr>
<tr>
<td>Committee Chair</td>
<td>250</td>
</tr>
<tr>
<td>Committee Member</td>
<td>200</td>
</tr>
<tr>
<td>Publications</td>
<td></td>
</tr>
<tr>
<td>Bulletin Editor</td>
<td>350</td>
</tr>
<tr>
<td>INFOR Editor</td>
<td>350</td>
</tr>
<tr>
<td>Special Editions</td>
<td>150</td>
</tr>
<tr>
<td>Others</td>
<td>200</td>
</tr>
<tr>
<td>Local Council</td>
<td></td>
</tr>
<tr>
<td>President</td>
<td>350</td>
</tr>
<tr>
<td>Vice-President</td>
<td>250</td>
</tr>
<tr>
<td>Secretary</td>
<td>200</td>
</tr>
<tr>
<td>Treasurer</td>
<td>200</td>
</tr>
<tr>
<td>Others</td>
<td>150</td>
</tr>
<tr>
<td>Past-President</td>
<td>100</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
</tr>
<tr>
<td>IFORS Executive</td>
<td>250</td>
</tr>
</tbody>
</table>
55th CORS Annual Conference
May 27–29, 2013
Hyatt Regency Hotel, Downtown Vancouver (see details below)
http://cors.forestry.ubc.ca

Join us in beautiful Vancouver for next year’s national meeting during May 27–29, 2013. Consistently ranked as one of the most liveable cities in the world during the past decade, Vancouver offers visitors outstanding opportunities for outdoor adventure as well as the urban amenities of a world-class city.

Please contact Taraneh Sowlati, Conference Chair, at taraneh.sowlati@ubc.ca if you are interested in organizing a cluster or session, or submitting a paper.

The venue of the conference this year will be the Hyatt Regency Vancouver hotel. It is also the ideal starting point to explore the most important Vancouver attractions. It has a privileged location in the heart of the city, and is surrounded by shops, restaurants and entertainment. It is in walking distance from the shops of Robson Street, the Stanley Park sea wall, China Town, the Vancouver Convention Centre, and the Rogers Arena, home of the Vancouver Canucks. It has easy access to public transportation since it is located besides the Burrard Sky Train Station. The hotel website is http://vancouver.hyatt.com/hyatt/hotels-vancouver/.

Online hotel reservations can be made at the link https://resweb.passkey.com/go/corsscrp or by calling the hotel directly at 1-888-421-1442.
Prices for CORS members (prices per night) are as follows:

**Standard Room – King/Double**  CAD 199.00  
**Balcony Room**  CAD 229.00  
**Business Plan**  CAD 234.00  
**Balcony View King**  CAD 249.00  

For more information, including registration, fees, and abstract submission, please check the conference website, [http://cors.forestry.ubc.ca](http://cors.forestry.ubc.ca).

Taraneh Sowlati  
Conference Chair
2013 CORS Practice Prize Competition

Each year the Canadian Operational Research Society conducts a competition on the practice of OR at its annual conference. There are two basic purposes behind the Competition, the first being the obvious one of recognizing outstanding OR practice. The other is to focus attention on OR and its applications by practitioners from Canada by attracting quality papers to the CORS National Conference. Entries are expected to report on a completed, practical application, and must describe results that had a significant, verifiable and preferably quantifiable impact on the performance of the client organization.

Award:
Up to a maximum of $1800 in prize money may be awarded by the committee; however, the committee reserves the right not to award any prize. Prizes (First, Second, Third/Honourable Mention) are awarded at the discretion of the Committee. Every team member receives a certificate.

Eligibility:
Work on the submitted project may have taken place over a period of several years, but at least some of the work must have taken place over the last two years. Previous publication of the work does not disqualify it; however, you may not report on a project which has been previously submitted to the CORS Competition on the Practice of OR. The submitter/author must be a resident of Canada.

Requirements of Finalists:
Finalists must submit a detailed written report not exceeding 25 pages in the body and make an oral presentation of the paper at the CORS Annual Conference. They are also required to prepare a one page project summary, suitable for publication in the CORS Bulletin and on the CORS website, detailing their project and its impact on the client organization.

How to Enter the Competition:
To enter this year’s competition, one or more of the authors is to submit an application before March 18, 2013 to:

Rick Caron
Department of Mathematics and Statistics
University of Windsor
Windsor, ON  N9B 3P4
Phone: 519-253-3000 ext. 3043
E-mail: rcaron@uwindsor.ca

A complete entry will include:

1. An abstract both by e-mail and in hardcopy, not exceeding 500 words of a paper on an actual success story of OR.
2. A letter by an executive of the client organization that sponsored the application, attesting that this application truly had an impact and that the organization would not object to having a paper presented.
3. The phone number of the author(s) and the name(s), title(s) and phone number(s) of at least one executive of the client organization where the OR application was put into effect.

**Selection Criteria:**
The main criteria considered in evaluating submissions are:

1. The project, which should exemplify the challenging application of the operational research approach to the solution of significant applied problems.
2. The quality of the analysis, of the modeling and of the successful implementation of the results at the client organization.
3. The significance of the impact of the results and recommendations on the performance of the client organization.
4. The presentation, both written and oral. A crucial part of the presentation is a "case history" of the project, which describes the project's development from start to finish, and focuses upon the challenges faced by the analysts.

**Important Dates/Deadlines:**
Applications must be received by **March 18, 2013.**
Finalists will be selected by **April 8, 2013.**
Finalists must submit a detailed written report by **April 29, 2013.**
Finalists must make an oral presentation of the paper at the CORS Annual Conference in Vancouver, BC, **May 27–29, 2013.**

For more information, please contact the Practice Prize Committee Chair:

Rick Caron
University of Windsor
E-mail: rcaron@uwindsor.ca
Announcements

CORS Special Interest Groups

CORS Council recently approved a policy on Special Interest Groups (SIGs). A SIG provides a mechanism to promote CORS, the SIG area and the SIG members, as well as the opportunity for CORS members with common interests to interact and network.

SIGs formed so far include:

- CORS Queueing Theory SIG: contact Doug Down (downd@univmail.cis.mcmaster.ca, McMaster University, Department of Computing and Software).
- CORS Health Care Operational Research SIG: contact John Blake (john.blake@dal.ca, Dalhousie University, Department of Industrial Engineering).
- CORS Forestry SIG: contact Gregory Paradis (gregory.paradis.1@ulaval.ca, Université Laval, Department of Forest Science), or go to http://cors-forestrysig.pieorswirls.com/.

If you would like to join a SIG, contact the persons listed above, or simply indicate that you would like to join when you renew your CORS membership.

CORS encourages members with common interest in an area within or related to operational research to form additional SIGs. More information about SIGs can be found online at http://www.cors.ca/en/membership/index.php.

Discussions are underway about forming SIGs in several additional areas. If you are interested in forming a SIG in a particular area, then feel free to contact the CORS SIG Committee: Elkafi Hassini (hassini@mcmaster.ca), Armann Ingolfsson (armann.ingolfsson@ualberta.ca), and Douglas Woolford (dwoolford@wlu.ca).
CORS Bulletin

Volume 46 Number 4
November 2012

CORS SIG News

Health Care Operational Research

The Health Care Operational Research Special Interest Group (HCOR) is actively seeking new members. The group’s purpose is to: 1) advance the development of operational research in health care; 2) disseminate knowledge in the field; and 3) increase the visibility of health care OR in industry and academia. Individuals interested in health care in OR in any of its various aspects or applications are welcome and invited to join the SIG. Please contact John Blake (john.blake@dal.ca) for more information or to join the group.

HCOR is also in the process of organizing a session track for the 2013 CORS meeting in Vancouver May 27–29, 2013. We are seeking chairs to organize sessions as well as seeking individual contributed talks. Derek Atkins from UBC is the track chair and is organizing sessions on behalf of HCOR. Please contact Derek (derek.atkins@sauder.ubc.ca) if you have ideas for a session or are interested in contributing a talk.

Forestry

The first annual Forestry SIG meeting took place during the CORS annual conference in Niagara Falls, with several new participants joining during the meeting. The official SIG formation petition was sent to the CORS President on November 1, 2012. There are 38 members to date (including at least five new CORS members who signed up because of this SIG). Gregory Paradis was elected founding FSIG president.

FSIG will henceforth be responsible for organizing the Forestry Cluster at the CORS annual conference and selecting the Cluster Chair. Luc LeBel has generously agreed to act as Forestry Cluster Chair for CORS 2013, assisted by Gregory Paradis.

Gregory Paradis and Glen Armstrong will act as guest co-editors on a forestry-themed special issue of INFOR. There will soon be a call for papers issued, with a target publication date of approximately the fourth quarter of 2013.

A private Google Group has been set up to host FSIG online discussions, and a public website (http://cors-forestrysig.pieorswirls.com/) has been online since February 2012 (the home page includes a sign-up form for new members to join).
CORS Section News

Calgary

The Calgary Section reports that Dr. Mozart Menezes, who recently joined the faculty of the Operations Management area at the Haskayne School of Business, University of Calgary, gave a talk on September 20 on “The Wisdom of Voters: Evaluating the Weber Objective at the Condorcet Solution.”

Toronto Student

The Toronto Student Section of CORS held events in September and October. On September 26, Dr. Fatih Safa Erenay of the Department of Management Science, University of Waterloo, spoke on “Optimal Colorectal Cancer Prevention and Surveillance.” On October 25, Professor Vedat Verter of the Desautels Faculty of Management, McGill University, presented a talk entitled “Sustainable Supply Chains: An Overview and Outlook.”
New Master’s Level Analytics Programs in Canada: Part 1

This is the first of a series of articles on new Master’s level programs in Analytics that have recently been developed at Canadian universities. In this issue, we have an interview with Dr. Yuri Levin, Program Director for the new Queen’s School of Business (QSB) Master of Management Analytics (www.qsb.ca/mma).

Please describe your new program. What do you see as the strengths of the program? What have you chosen to emphasize as of particular importance?

Modern business and non-profit organizations are under increasing pressure to harness the extraordinary volumes of data that are now available to them through advances in information technology. This has stimulated rapid growth in a field of practice called “Business Analytics”, or “Analytics” – a technically complex area spanning operations research, statistics, management information systems, financial analysis, marketing, and other cognate areas. The key challenge is for persons with the right technical skills to work effectively in management environments; for example, to be able to understand the business as well as technical issues in projects, to work in teams, and to communicate effectively to non-technical colleagues.

The program is structured around three themes: descriptive analytics, predictive analytics, and prescriptive analytics, with the essential skills of understanding business issues and communicating with co-workers woven throughout. To develop graduates’ abilities to work in teams, we plan team-building exercises and communication workshops. The students will be placed in diverse teams in the beginning of the program and stay in the same teams throughout, working on assignments, projects, and presentations. The program starts with a two-day team-building workshop followed by ongoing individual team coaching throughout the program.

The program will target students with significant prior mathematical training and will provide thorough coverage of the mathematical and statistical theories and methods that underlie modern analytics, while maintaining a practitioner focus. We will introduce students to commercial-grade software packages for database management, statistical analysis, and optimization as well as other modern analytical packages used regularly by professionals. We will expect them to use these resources and explore different lines of attack to real-world problems. Students will be provided with significant opportunities to interact with mentors from the analytics community, both formally and informally.

How does your program differ from a traditional operations research graduate program? How would you distinguish the two?

There are two major distinguishing features. The first is the integration of curriculum around data acquisition and analysis. OR programs typically separate data gathering from the decision problem – there are one or two standard statistics courses in the curriculum, but the rest essentially assumes the existence of nice clean data sets. Our program gives significant attention to the problems of getting, cleaning and combining the data in the first place, often
from widely diverse systems, and then considers the management implications of inevitable data flaws on the final conclusions. The program is designed to achieve integration around the central flow of Data Acquisition and Screening → Descriptive Analytics → Predictive Analytics → Prescriptive Analytics → Communication, which we see as a key organizing structure.

The second is the focus on applications, management issues, and teamwork. The program will have a great deal of team project work on real-world data sets containing many of the problems of “messy” data that are encountered in practice. The students will gain practice with realistic (i.e., large and messy) data sets, rather than “toy” data sets commonly used for instruction. We already have commitments from industry sources to furnish exactly this type of ‘messy’ large data. The focus on “big data” and “analytics” will be maintained throughout the program. In fact, we anticipate that students who are already employed will bring some challenging data sets and problems to the program. While the program curriculum does include review of fundamental mathematical and statistical theories and methods, the material is discussed from a practitioner’s perspective. And perhaps just as important, the program is designed to develop team skills, business acumen, analytic capabilities, and communication skills – skills that will be very important for persons on this career path.

*How much of the curriculum will involve optimization, simulation, or other topics typically taught in OR courses?*

A key objective of the program is to link OR topics including optimization and simulation to big data and statistical analysis. Traditional OR courses often use rudimentary statistical analysis; statistical analysis courses use almost no optimization; and both OR and statistical analysis courses typically do not use big data. The MMA program provides a great opportunity to tie together big data, stats, and operations research.

*What types of students will you target for admission?*

The 10-month program will be taught in QSB’s downtown Toronto classroom on evenings and alternate weekends, with two one-week residential sessions held at Queen’s Kingston campus. The program is targeted at students who may need to continue to work full-time while they complete their degree. Typically, students entering this program will fit one of three profiles:

- People with an undergraduate degree in business and strong aptitudes and backgrounds in mathematics looking for more analytical training;
- People with a degree in mathematics, engineering or science looking for applied, management-oriented, analytics training; and
- IT professionals with strong mathematics backgrounds aiming to broaden their knowledge of emerging analytics applications.

*What would the typical graduate of your program look like: what entry-level positions and possible career trajectories do you envision for your graduates?*
Our learning goals for graduates of this program include:

**Descriptive Analytics:** be able to develop and use advanced database and search techniques to extract useful data from very large data sources and apply modern methods of data summarization and visualization to enhance understanding of organizational environments.

**Predictive Analytics:** be able to apply mathematical modeling and forecasting techniques to prepare predictions of changes in organizational environments.

**Prescriptive Analytics:** be able to develop mathematical and computer models that can assist management decisions in areas such as risk management, pricing and promotion of products and services, logistics, and physical and human resource capacity allocation.

**Management:** understand that advanced information technology, statistics, and mathematical modeling cannot, in isolation, solve management problems; it is the integration of these methods in an organizational context that leads to successful implementations.

Graduates of this program will possess knowledge and skills that are in high and increasing demand. All of the organizations that we interviewed indicated that they anticipate increased hiring in this area. Graduates without previous work experience will have excellent potential for first-time employment as analysts in consulting and private and public sector industries. Graduates with previous work experience will be better able to move into analytical leadership positions in their current organizations or move to other organizations.

**Do you think certification is important to the students that will go through your program?**

Yes, certainly. During the MMA program, the students will receive training that can be applied for a Certified Analytics Professional (CAP) with INFORMS (The Institute for Operations Research and the Management Sciences). The program also provides twenty-three instructional hours which can be applied to the certification requirements for either a Certified Associate in Project Management (CAPM), or (with additional training and work experience) a Project Management Professional (PMP) with the Project Management Institute (PMI). Also, as part of the program, the students will take the Predictive Modeling Certification Examination administered by SAS.

**Do you think CORS should get involved with analytics? If so, how?**

Certainly, CORS should get involved with analytics as soon as possible. Many of the measures currently underway at INFORMS are good ideas. The main thing is to create awareness that O/R is at the centre of analytics.
# Meetings and Conferences

## CORS Business Meetings

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 30, 2012</td>
<td>CORS Council Meeting, Teleconference</td>
</tr>
<tr>
<td>January 25, 2013</td>
<td>CORS Council Meeting, Toronto, ON</td>
</tr>
<tr>
<td>April 5, 2013</td>
<td>CORS Council Meeting, Teleconference</td>
</tr>
<tr>
<td>May 26, 2013</td>
<td>CORS Council Meeting, Vancouver, BC</td>
</tr>
<tr>
<td>May 27, 2013</td>
<td>CORS Council Meeting, Vancouver, BC</td>
</tr>
<tr>
<td>May 28, 2013</td>
<td>CORS Annual General Meeting, Vancouver, BC</td>
</tr>
</tbody>
</table>

## CORS Annual Conferences

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>CORS Annual Conference, Vancouver, BC</td>
</tr>
<tr>
<td>2014</td>
<td>CORS Annual Conference, Ottawa, ON</td>
</tr>
<tr>
<td>2015</td>
<td>CORS Annual Conference, Montreal, QC – joint with INFORMS</td>
</tr>
<tr>
<td>2017</td>
<td>CORS Annual Conference, Quebec City, QC – joint with IFORS</td>
</tr>
</tbody>
</table>

## Other Conferences

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Winter Simulation Conference, Berlin, Germany</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.wintersim.org">http://www.wintersim.org</a></td>
</tr>
<tr>
<td>2013</td>
<td>ICORES 2013 – 2(^{nd}) International Conference on Operations Research and Enterprise Systems, Barcelona, Spain</td>
</tr>
<tr>
<td>2013</td>
<td>POMS 24(^{th}) Annual Meeting, Denver, CO</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.pomsmeetings.org">http://www.pomsmeetings.org</a></td>
</tr>
<tr>
<td>2013</td>
<td>EURO/INFORMS Joint International Conference, Rome, Italy</td>
</tr>
<tr>
<td>2013</td>
<td>INFORMS 2013, Minneapolis, MN</td>
</tr>
<tr>
<td>2014</td>
<td>INFORMS 2014, San Francisco, CA</td>
</tr>
</tbody>
</table>

**CORS 2013**

May 27–29, Vancouver, BC
WWW Conference Listings

IFORS Conferences: http://www.ifors.org/panorama/conferences/index.shtml
Netlib Conferences Database: http://www.netlib.org/confdb/Conferences.html
SIAM Conference Home Page: http://www.siam.org/meetings/calendar.php
POMS Conference Page: http://www.poms.org/conferences/

CORS Funding Opportunities

Graduate Student Conference Support (GSCS) Program

CORS has established the GSCS program to encourage attendance of graduate students at conferences, symposia, or workshops specifically aimed at graduate students, such as student conferences, doctoral colloquia, and conferences for junior operations researchers. CORS may provide partial funding up to $500 per student for attendance at such events. Note that the GSCS program will not fund attendance at CORS meetings, because CORS has a separate program for this purpose. All GSCS funding is subject to availability of funds and the following eligibility criteria:

- Student is a member of CORS.
- Student’s supervisor is a member of CORS.
- Student is enrolled in a graduate program in a field related to operational research.
- Student is studying at a Canadian university, or is a Canadian citizen or permanent resident studying abroad.

The application process is competitive. The following criteria will be used to select applications that will be funded:

- The quality of the paper to be presented at the conference, if applicable.
- The benefits that the student is likely to derive from attending the conference.
- The stage that the student has reached in his/her degree program.
- Prior GSCS funding received by the applicant (new applicants will be given preference, all else being equal).

An online application form for GSCS funding is available at http://www.cors.ca/en/students/i_graduate.php

Since funding is limited, applicants are encouraged to submit their applications in a timely manner. Applications must be received at least two months before the conference date to receive full consideration. Applicants who meet this deadline will be notified of the outcome of their application at least one month before the conference date. For further information, contact:

Fredrik Odegaard, CORS GSCS Coordinator:
Phone: 519-661-4278 E-mail: fodegaard@ivey.uwo.ca
INFORMS Teaching Effectiveness Colloquium (For Faculty)

In conjunction with the Annual INFORMS Meetings, INFORMS hosts a Teaching Effectiveness Colloquium. CORS has funding available to partially support a limited number of faculty members interested in attending. Faculty members that are awarded funding are expected to:

- give a presentation in an OR/MS Education session at CORS National Meeting, and
- write a short article regarding OR/MS education for the CORS Bulletin.

Funding is restricted to faculty members, and not available to graduate students. For more information and instructions on how to apply please contact:

Fredrik Odegaard, CORS Education Chair:
Phone: 519-661-4278  E-mail: fodegaard@ivey.uwo.ca

CORS Traveling Speakers Program

The Traveling Speakers Program (TSP) enables local sections to bring Canadian OR practitioners / researchers as speakers to their local events. In order to keep costs in line while maximizing the CORS National profile, CORS sponsorship will be limited to 50% of the total expenses, up to a maximum of $500 per speaker or $1000 for a single event (conference, workshop). Other expenses can be covered by the local section. The program of the event must acknowledge the contribution of CORS. Each local section must contact the TSP coordinator to obtain approval for funding preferably at least one month in advance of the event date. Payment will be made by the CORS Treasurer upon receipt of the expense report.

Samir Elhedhli CORS TSP Coordinator:
Phone: 519-888-4567  E-mail: elhedhli@uwaterloo.ca
The Next Issue

The next issue of the Bulletin is scheduled to appear in February. Along with the regular features and news from the local sections, it will contain more information about the next CORS conference. Contributions to this issue, especially news on the activities of local sections or CORS members, should be submitted by January 18, 2013 to:

Diane Bischak
Editor, CORS-SCRO Bulletin
Haskayne School of Business
University of Calgary
Calgary, AB T2N 1N4
Phone: 403-220-3368
E-mail: diane.bischak@haskayne.ucalgary.ca

The preferred method of submission is by an MS-Word attachment to an e-mail.

CORS Bulletin Translation Policy

Items that are CORS business will be translated into English and French. All other items will be published in the language they are submitted in.

CORS Bulletin Advertising Policy

Ads cost $120 per page, proportional for fractional pages. Logos and prepared layouts can be accommodated. This fee also includes distribution of the advertisement on the CORS ListServ. Direct inquiries to the Editor.

CORS ListServ

As a benefit of membership, members may use the CORS ListServ to transmit messages, announcements, and job postings to the entire membership or to a targeted subgroup such as a local section. For example, you can send

- messages regarding the activities and business of the Society;
- announcements about conferences, conference sessions, special journal issues, seminars or other activities provided that these are related to operational research in its broadest sense;
- job postings of general interest to CORS members.

The ListServ is not used for commercial purposes, and all messages are vetted before they are sent out. To submit items to the ListServ, e-mail Erla Anderson, CORS Membership Services at erla@shaw.ca.

For non-members, a fee of $60 is charged for the distribution of Job Postings and other announcements or messages of interest to the CORS membership.
The Canadian Operational Research Society was founded in 1958. Its goal is to advance the theory and practice of OR and to stimulate and promote contacts between people interested in the subject.

Publications: A quarterly scientific journal called INFOR and a news Bulletin.

Meetings: An annual National Conference with award ceremony, occasionally organized jointly with an international society (IFORS, INFORMS), as well as numerous local events organized by the local sections.

Local Sections: CORS has twelve local sections located throughout Canada and three student sections.

Awards and Prizes: CORS presents the following annual Awards and Prizes at its National Conference:

- **Award of Merit** for significant contributions of a present or past member of CORS to the profession of OR.
- **Harold Larnder Memorial Award** to an individual who has achieved international distinction in OR.
- **Omond Solandt Award** to an organization, private or governmental, that is deemed to have made an outstanding contribution to OR in Canada.
- **Practice Prize** for the challenging application of the OR approach to the solution of applied problems.
- **Service Award** for outstanding contributions of time and service to the Society.
- **Student Paper Competition** to recognize the contribution of a paper either directly to the field of OR through the development of methodology or to another field through the application of OR.

Graduate Student Funding: CORS encourages attendance of graduate students at conferences, symposia, or workshops by providing partial funding. Visit CORS website for details.

CORS Diploma: This diploma is awarded to students graduating from a university curriculum comprising several OR courses. Criteria and an example certificate may be found on the CORS website.

Membership Directory: An online Directory of CORS Members is available as a membership benefit.

To join CORS: Go to the CORS website (www.cors.ca) and join online by credit card using the form found under membership services or complete the PDF application form found on the CORS website and mail it with payment to the address below.

Fees: Member $110; Retired Member $55; Student Member $45

Website: http://www.cors.ca