



**NEWSLETTER OF THE CANADIAN  
GEOMORPHOLOGY RESEARCH GROUP**

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**PRESIDENT'S MESSAGE - MOT DU PRÉSIDENT**

The CGRG executive has had another busy and productive year in helping foster the organization and activities of geomorphologists working across the country. In this final message as the current president, I wish to use this article to bring you up to date on several initiatives that are currently underway, as well as outline a number of items for discussion at the 2005 CGRG AGM to be held during the CAG at the University of Western Ontario.

Foremost, the CGRG executive is delighted to announce that the J. Ross Mackay Award will be given this year to Dr. John Orwin. John is currently a postdoctoral fellow working with J. Clague in the Dept. of Earth Sciences at Simon Fraser University. A full citation of John's many achievements is provided herein and a summary of his Mackay Lecture will appear in the next newsletter. Congratulations to John! The diligent work of the Awards Committee this year is also acknowledged.

At its most recent meeting on 11 March 2005, the CGRG executive passed a motion to endorse the Canadian Geophysical Union (CGU) as one of its affiliates. The CGU executive has similarly endorsed affiliation with CGRG. A formal, written agreement between the two organizations is presently being prepared as the basis for final approval of the arrangement. The proposed agreement will allow CGRG membership to be obtained through the CGU, while at the same time, these members will obtain a reduced rate for their CGU

membership. A reciprocal arrangement will also exist in which geomorphologists will have the option of joining the CGU through their CGRG membership. This new affiliation arises out of innumerable discussions with geomorphologists, particularly those with interests in modeling and experimentation, who have either recently participated in one of the recent CGU meetings or is an active member of the Erosion and Sedimentation (E&S) Committee. This committee has operated within the Hydrology section of CGU for the last five years and has formally requested that CGRG co-sponsor sessions at CGU.

We have also recently initiated discussion on the mechanisms by which student members might be more actively recruited into CGRG and better served by its mandate. At its most recent meeting, the executive unanimously passed a motion that will allow graduate students of current CGRG members to obtain free membership in CGRG until the time of their graduation. The supervisors of graduate students wishing to join CGRG should contact Kevin Driscoll, our treasurer, to set up the new memberships. Kevin's contact information can be found in this newsletter. Trevor Bell, the incoming CGRG President, is currently in the process of canvassing graduate students on their views of CGRG and the services which our research group might provide them.

The CGRG has received several requests for sponsorship of special sessions at meetings in 2006. We encourage all applicants who are organizing special sessions and considering applying for CGRG sponsorship to prepare a written application which includes:

- i) a title and description of the objectives of the session
- ii) contact information for the organizers
- iii) the name and contact information for a point person who is willing to prepare a short outcomes report for publication in the CGRG newsletter
- iv) a listing of expectations regarding CGRG sponsorship

The CGRG is sponsoring two sessions at the CAG covering three full days of paper presentations, June 1-3. Mary-Lou Byrne is the organizer of a session on *Brian McCann and his Contributions*, while Peter Ashmore has put together a session on *River Environment Processes*. The response to both sessions has been superb, and we expect a similarly populous turnout for the CGRG AGM and Mackay Lecture on June 2!

The executive has several important items on the agenda for discussion at the AGM. Foremost, we need to consider whether or not CGRG should play a more active role than at present in the IAG (International Association of Geomorphologists) and CGC (Canadian Geoscience Council) respectively. Currently, Canada is not represented on the executive of the IAG, and the CGRG executive is not aware of any suitable candidates who are willing to serve in this capacity. Jeff Ollerhead (Mount Allison) has agreed to initiate a discussion on the role of the CGC, the issues surrounding professional registration, and the scope of CGC's mandate. (See Jeff's article in this newsletter which serves as a short introduction to the discussion). Currently our voice at CGC's table is a very remote one via CAG representation, and eventually, CGU. Several of the initiatives undertaken by the executive this year have been specifically designed to increase the number of active members in CGRG, and

eventually, to provide a fuller range of services to its members. We would like to hear your response to these initiatives and to receive additional suggestions. In particular, we would like to entertain your ideas on how CGRG interactions with our national (and new) affiliates might be further strengthened. Finally, a rather mundane but important matter concerns the updating of the CGRG constitution. In affiliating with CGU, we must adjust our constitution to reflect the new arrangement. Preliminary examination of the original document has revealed that the phrasing is terribly out of date with regard to current practice, particularly in terms of how the executive is appointed and operates. These changes will be briefly noted at the AGM (don't let this put you off!) in preparation for a general mailing and vote by ballot in early summer.

In closing, I would like to acknowledge once again this year the monumental contributions of both Dan Smith (Victoria) who maintains the CGRG website and the CANGEORG listserver, and Scott Lamoureux (Queen's), our new newsletter editor. Communication is a vital component in keeping the CGRG operational, and the many hours of time donated by Dan and Scott cannot be overvalued. They also give the fastest replies to email that I have ever witnessed! Kevin Driscoll, our secretary/treasurer has been enormously helpful in answering my many 'how do I ...' questions, in initiating the discussion on student membership, and in constitutional matters. It has been a great pleasure to serve the CGRG as President this year and to assist the executive in advancing the role and visibility of geomorphologists working in Canada.

I look forward to seeing many of you at the CAG. Have a safe and productive summer of research.

Best wishes, Cheryl McKenna Neuman

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Le Comité exécutif du GRCG a connu une autre année occupée et productive à travers la stimulation de l'organisation et des activités des géomorphologues travaillant dans le pays. Dans ce dernier message en tant que présidente, je désire vous présenter plusieurs initiatives qui sont présentement en cours d'instauration ainsi que souligner certains points à discuter à l'AGA 2005 du GRCG qui sera tenue lors de la ACG à l'Université de Western Ontario.

Tout d'abord, le comité exécutif du GRCG est heureux d'annoncer que le Prix J. Ross Mackay sera attribué cette année au Dr. John Orwin. John est présentement chercheur postdoctoral et travaille avec J. Clague au Dept. des Sciences de la Terre de l'Université Simon Fraser. Un compte rendu des nombreuses réalisations de John ainsi qu'un résumé de sa *Présentation Mackay* apparaîtra dans le prochain bulletin. Félicitations John! Le travail diligent du Comité des Prix est également reconnu.

Lors de sa dernière rencontre, le 11 mars 2005, le comité exécutif du GRCG a adopté une motion reconnaissant l'Union Géophysique Canadienne (UCG) comme une de ses affiliées. Le comité exécutif de l'UCG a également reconnu son affiliation avec le GRCG. Une entente formelle par écrit, qui servira de base pour une approbation finale entre les deux organisations, est présentement en préparation. L'entente proposée permettra l'adhésion au GRCG par l'entremise de l'UCG, et ces membres pourront obtenir un tarif réduit pour leur adhésion à l'UCG. Une entente réciproque existera également, offrant aux géomorphologues la possibilité de rejoindre l'UCG lors de leur adhésion au GRCG. Cette nouvelle affiliation est le fruit d'innombrables discussions avec les géomorphologues, particulièrement ceux ayant un intérêt pour la modélisation et l'expérimentation, qui ont soit récemment participé à une rencontre de l'UCG ou qui sont membres actifs du comité Érosion et Sédimentation (E&S). Au cours des cinq dernières années, ce comité a opéré dans la section Hydrologie de l'UCG et a fait la demande formelle pour que le GRCG

commandite conjointement des sessions à l'UCG.

Nous avons également commencé à débattre des mécanismes par lesquels les membres étudiants pourraient être plus efficacement recrutés au sein du GRCG, ainsi que mieux servis par son mandat. Lors de sa plus récente réunion, le comité exécutif a adopté une motion permettant aux étudiants gradués de membres actuels du GRCG d'obtenir une adhésion gratuite au GRCG, et ce jusqu'à leur graduation. Les superviseurs des étudiants désirant joindre le GRCG doivent contacter Kevin Driscoll, notre trésorier, afin d'établir l'adhésion. Les coordonnées de Kevin peuvent être trouvées dans ce bulletin. Trevor Bell, le nouveau président du GRCG, est présentement en travail de prospection auprès des étudiants gradués afin de mieux connaître leur vision du GRCG et d'établir les services que notre groupe de recherche pourrait leur fournir.

Le GRCG a reçu plusieurs demandes de commandites de sessions spéciales lors des rencontres de 2006. Nous encourageons tous les organisateurs de sessions spéciales qui désirent s'inscrire pour une commandite du GRCG, de préparer une demande écrite incluant :

- i) le titre et la description des objectifs de la session
- ii) les coordonnées de l'organisateur
- iii) le nom et les coordonnées d'une personne pouvant produire un court rapport sur les activités de la session, pour publication dans le bulletin du GRCG
- iv) une liste des attentes concernant la commandite par le GRCG

Le GRCG commandite deux sessions lors de l'ACG; celles-ci couvriront trois jours de présentations d'articles du 1<sup>er</sup> au 3 juin. Mary-Lou Byrne est l'organisatrice d'une session *Brian McCann and his Contributions*, alors que Peter Ashmore a rassemblé une session sous le thème *River Environment Processes*. Les deux sessions ont obtenu une réponse enthousiaste et nous attendons une assemblée toute aussi

importante pour l'AGA du GRCG ainsi que pour la Présentation Mackay le 2 juin!

Plusieurs points de discussion importants sont prévus à l'agenda de l'AGA. Tout d'abord, nous devons décider si le GCRG devrait ou nous jouer un rôle plus actif dans l'IAG (International Association of Geomorphologists) ainsi que dans le Conseil Géoscientifique Canadien (CGC). Présentement, le Canada n'est pas représenté sur le conseil exécutif de l'IAG et le GCRG ne connaît pas de candidats qualifiés désirant occuper une telle position. Jeff Ollerhead (Mount Allison) a accepté d'aborder la question du rôle du CGC, concernant une accréditation professionnelle ainsi que la portée du mandat du CGC. (voir l'article de Jeff dans ce bulletin, une courte introduction à ce questionnement). Actuellement, notre voix à la table du CGC en est une très distante via la représentation de l'ACG, et éventuellement, de l'UCG. Cette année, plusieurs initiatives entreprises par le comité exécutif ont été spécialement conçues afin d'augmenter le nombre de membres actifs au sein du GCRG, et éventuellement, d'offrir un plus grand spectre de services à ses membres. Nous aimerions connaître vos réactions à ces initiatives ainsi que vos suggestions additionnelles. Nous aimerions en particulier connaître vos idées sur la façon dont les interactions avec notre nouvel affilié national pourraient être renforcées davantage. Finalement, une question plus mondaine mais tout aussi importante concerne la mise à jour de la constitution du GCRG. En s'affiliant avec l'UCG, nous devons ajuster notre constitution afin qu'elle reflète ce nouvel arrangement. L'examen préliminaire de ce document a révélé

que la formulation ne reflète pas les pratiques actuelles, particulièrement en ce qui a trait à la façon dont les membres du comité exécutifs sont nommés et opèrent. Ces changements seront brièvement abordés lors de l'AGA (ne soyez pas effrayés par ça!) en préparation d'un envoi postal et d'un vote général tôt cet été.

En conclusion, j'aimerais remercier une fois encore, pour leurs contributions monumentales, Dan Smith (Victoria) qui maintient le site web du GCRG ainsi que du CANGEORG listserver, ainsi que Scott Lamoureux (Queen's), notre nouvel éditeur du bulletin. La communication est une composante vitale dans le maintien des opérations du GCRG et les nombreuses heures offertes par Dan et Scott ne doivent pas être sous-évaluées. De plus, jamais n'ai-je vu des gens répondre aussi rapidement à leurs courriels! Kevin Driscoll, notre secrétaire/trésorier, a été extraordinairement utile en répondant à mes nombreuses questions <Comment fait-on?>, et en ouvrant le débat sur l'adhésion étudiante ainsi que sur les questions constitutionnelles. Cela a été un grand plaisir de servir le GRCG cette année à titre de présidente ainsi que d'aider le comité exécutif dans l'avancement du rôle et l'accroissement de la visibilité des géomorphologues qui travaillent au Canada.

J'espère voir plusieurs d'entre vous à l'ACG. Je vous souhaite un été de recherches sans incident et productif.

Meilleurs Voeux, Cheryl McKenna Neuman

[Ed.- Thanks to David Fortin for translation]

## 2005 RECIPIENT ROSS MACKAY AWARD

Dr. John Orwin of the Department of Earth Sciences, Simon Fraser University, has received the 2005 J. Ross Mackay Award in recognition of his original contributions to Canadian geomorphology that integrate modern geographical techniques with traditional field work. Dr. Orwin has designed suspended sediment sensors and applied these instruments and electronic field mapping to data collection in the Himalayas, the Southern Alps of New Zealand, the Canadian Rocky, Selkirk, and Coast Mountains, Iceland and, recently, Antarctica. His use of computer-aided cartography and photogrammetry, multivariate statistics and GIS visualization brings a new perspective to long-standing problems.

The following recent publications demonstrate Dr. Orwin's innovative approach to data collection, assimilation and presentation in geomorphology:

Orwin, JF, Clague, JJ, Gerath, RF. 2004. The Cheam rock avalanche, Fraser Valley, British Columbia, Canada. *Landslides 4*: 289-298.

This paper incorporates geomorphology, stratigraphy and radiocarbon ages into a digital elevation model to infer the extent, process and cause of a catastrophic large Holocene rock avalanche that had previously puzzled landslide researchers. The surface morphology of the deposit implied two separate events, but stratigraphic information showed that much of the surface form arose from liquefaction of the impacted surface, rather than discrete events. The authors used advanced GIS-rendering methods for analysis and presentation of the results, allowing very powerful communication of the form of the deposit, while integrating

stratigraphic information in the same scene. The paper has a strongly applied aspect, in addressing a significant environmental hazard, and also includes native oral history implying loss of human life.

Orwin, JF and Smart, CC. 2004a. Short-term spatial and temporal patterns of proglacial suspended sediment transfer, Small River Glacier, British Columbia. *Hydrological Processes 18*: 1521-1542

Orwin, JF and Smart, CC. *In Press*. An inexpensive turbidimeter for monitoring suspended sediment. *Geomorphology*.

These papers, based on Dr. Orwin's PhD work, provided an incisive and original experimental approach to measuring the delivery of suspended sediment from proglacial surfaces. They developed a more sophisticated understanding of recent paraglaciation than had been possible before. This work involved development of a suitable suspended sediment sensor; inexpensive enough for broad deployment, but robust enough to survive in proglacial streams. A GIS-rectified photogrammetric mapping project generated a prize-winning geomorphic map of the catchment. Dr. Orwin also applied advanced multivariate statistics to show that, away from the glacier front, suspended sediment delivery was dominated by episodic remobilization of sediment stored in gravel channels). The work leads to doubts about much previous work based on arbitrarily positioned proglacial monitoring sites.

David Sauchyn

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## ANNUAL MEETING OF THE CANADIAN GEOMORPHOLOGY RESEARCH GROUP

The 12th Annual Meeting of the Canadian Geomorphology Research Group (CGRG) is being held conjunction with the Annual Meeting of the Canadian Association of

Geographers (CAG), Tuesday, May 31 to Saturday, to June 4, 2005 at the University of Western Ontario, London, Ontario.

The CGRG has planned several events to coincide with the CAG meetings and extends an invitation to everyone to participate. In addition to the Annual General Meeting (Thursday, June 2, 1200-1300 hrs, refreshments will be served), the J. Ross Mackay Award Lecture and local field trips, two special CGRG Sessions have been organized:

### **J. Ross Mackay Award Lecture**

The 2005 recipient of the J. Ross Mackay Award, Dr. John Orwin, will present a lecture "Exploring geomorphic processes in glacial environments: the role of instruments and statistics".

### **CGRG Special Session: Coastal and Northern Processes, Landforms, and Sediments**

The session is being presented in memory of Brian McCann and his contribution

to Geomorphology in Canada. Details of the papers and posters to be presented can be viewed at the website below.

### **CGRG Special Session: River Environment Processes**

This session contains inter-connected oral and poster sessions focused on recent research on the geomorphology, hydrology and biogeography of rivers and floodplains, especially in Canada, with applications to environmental change, human effects on rivers and riparian corridor management. Details of the papers to be presented can be viewed at: <http://cgrg.geog.uvic.ca/agm2005.html#cgrg2>

Additional details describing CGRG events and special sessions are available on the AGM 2005 website:

<http://cgrg.geog.uvic.ca/agm2005.html>

## **SPECIAL SESSION: CAUSAL CONNECTIONS AMONGST CHEMICAL/PHYSICAL WEATHERING, GEOMORPHOLOGY AND BIOLOGIC PROCESSES**

We would like to announce our session that is part of the Scientific Program at the Earth System Processes Meeting to be held in Calgary, Alberta from August 8-11 2005. Meeting sponsors are the Geological Society of America and the Geological Association of Canada.

### **Session T19. Causal Connections amongst Chemical/Physical Weathering, Geomorphology, and Biologic Processes.**

Session Organizers: Ed Johnson, University of Calgary; Yvonne Martin, University of Calgary; Josh Roering, University of Oregon; Peter Sak, Dickinson College; Art White, U.S. Geological Survey, Menlo Park.

Formulation of models for chemical weathering and geomorphic processes requires improved understanding of chemical and physical weathering, the effects of climate and the biota, and the scaling between laboratory and field relationships. Contributions are invited on

these topics using field and laboratory data and theory to address interactions in weathering systems in biogeochemical and geomorphic systems over a range of spatial and temporal scales.

We are pleased to announce that the keynote speaker for our session is Dr. Dave Montgomery, Department of Earth and Space Sciences, University of Washington.

In addition, there are several other sessions in this meeting that are also of interest to geomorphologists and we encourage you to take a look at the meeting web site: <http://www.geosociety.org/meetings/esp2/>. The deadline for abstract submissions is April 26, 2005. Abstract submission information can be found on the meeting web site.

Yvonne Martin

## CANADIAN GEOSCIENCE COUNCIL (CGC) UPDATE

The Canadian Geoscience Council provides an open forum for communications, discussion and debate to ensure the effectiveness and influence of the geosciences in addressing the needs and desires of the people of Canada, especially with regard to the quality of life, economic prosperity, and the maintenance and improvement of the natural environment (CGC mission statement). Members of the CGC come from affiliated organizations including the Canadian Association of Geographers (CAG). The CGC meets twice a year. In 2004, meetings were held in May and October in Calgary and Ottawa respectively.

At the May meeting, much of the discussion revolved around the themes of encouraging students to enrol in geoscience degree programs at university, educating the public on the 'value' of geoscience, and educating MPs on the 'value' of geoscience. Preliminary plans were crafted to develop new educational materials about geoscience for public and prospective student consumption. Efforts were made to ensure that geomorphology is included in any materials produced as part of this initiative.

The October meeting was the CGC hosting "Geoscience Summit 2004". The purpose of the meeting was to "review the status of Canadian geoscience and reach a consensus on key steps that the Canadian earth science community needs to take to ensure our continued relevance and viability in the short and long term" (text taken from the meeting invitation). The meeting was well attended by a

wide variety of people from government, private industry and academia. Discussion over the 2 days was wide ranging and exposed a number of divisions in our community. No official document has been released from this meeting (yet) but one should be forthcoming later this spring. Suggestions that geoscience should diversify (or be more inclusive) and embrace issues like water, waste management, natural hazards, alternative energy, etc. were well received by some 'camps' and not by others. An undercurrent of tension revolving around professional registration was also evident in some discussions.

If nothing else, "Geoscience Summit 2004" exposed some of the problems and conflicts within Canada's geoscience community. If there is any hope in getting different 'camps' of geoscientists talking, it probably rests with the CGC or a similar organization. Thus, it will likely be important for the CGRG to have a voice at the CGC table as there are many issues being discussed that can and will impact on CGRG members. Whether that voice is heard directly from the CGRG or via the CAG, CGU or some other organization is something CGRG members might wish to debate at our next AGM.

For more information on the CGC visit:  
[www.geoscience.ca](http://www.geoscience.ca)

Jeff Ollerhead (Mount Allison University)  
CAG representative to the CGC

## A BRIEF CGRG MEMBERS GUIDE TO THE CGU

The Canadian Geophysical Union (<http://www.cgu-ugc.ca>) is a home-grown (and much smaller) version of the American and European Geophysical Unions, with which it maintains affiliations. In some instances (e.g.

2004) CGU meetings occur in collaboration with AGU but normally there is an annual CGU meeting in early May held at the Banff Centre. Attendance at the annual meeting is typically of the order of 100-200 people. The CGU has a

Geodesy Section and a large, active Hydrology Section. Annual meetings typically include 2-3 days of hydrology sessions.

The Hydrology Section (CGU-HS, <http://www.fes.uwaterloo.ca/u/jsprice/CGU-HS/National/>) is the national organization for communicating with IAHS and, via CGU, to IUGG. CGU-HS is organized into several Committees (currently there are 10) covering different topic areas, several of which may be of interest to geomorphologists. The most obvious of these is the Erosion and Sedimentation Committee (E&S) that was formed a number of years ago as a direct parallel to the existing organization of AGU.

Officially the Committee has to have a Chair (Peter Ashmore) and Membership (Currently, Malcolm Conly, Dirk DeBoer, Mike Church and André Roy) who direct its activities. The Committee never formally meets (but don't tell anyone), except by email very occasionally, and we do the minimum amount of directing, but we do report annually to CGU Hydrology Section about the Committee's activities.

The official statement made when the E&S Committee formed was that we had as our objectives

*“The scientific advancement and practical application of knowledge of erosion, transport and deposition of sediment in fresh water systems with topic coverage similar to that of the IAHS Commissions on Continental Erosion and (some aspects of) Water Quality:*

- i) *communication of current research via discussion, meetings, conferences and publications;*
- ii) *identification and promotion of high priority research topics in the Canadian context*
- iii) *promotion and encouragement of the transfer of knowledge and technology in the field of interest.”*

Essentially we conceived it as a Canadian version of the International Commission on Continental Erosion. Dirk DeBoer is currently Secretary of, and the national representative to, the IAHS-ICCE (<http://duke.usask.ca/~deboer/ICCE/>) and the E & S Committee has become responsible for nominating, for CGU-HS, the national ICCE representative. Dirk is likely to do in perpetuity unless some ambitious competitor comes along!

The major role of E & S Committee is to propose and organize sessions at the annual CGU-HS meeting in areas relevant to the Committee objectives. Establishing the Committee has also enabled us to have joint sessions with the AGU E&S Committee when AGU and CGU have combined meetings (as in Montreal in 2004). We have also had a separate Special Session on sediment transport (in 2003) within the CGU Meeting but outside the Hydrology Section. The Special Session is significant because we broadened the scope of the session beyond our normal mandate, through a series of invited speakers, to encompass all aspects of the analysis of sediment transport processes and landscape/landform development at all scales, involving all approaches (observational, experimental, theoretical, numerical etc.), and all agents (water, ice, wind etc.) and including the application of sediment transport to environmental problems and the effect of human activity on processes and rates. In other words we stepped outside the fluvial realm into all areas of the interaction of sediment transport processes and landform dynamics. The intent was to try and attract the interest of the geophysics community in general to the analysis of landforms and landform dynamics.

Many CGRG members will find CGU and AGU meetings an attractive venue for their work. CGRG members can contribute in any area of interest to CGU and/or CGU-HS, not just via the E&S Committee. This includes proposing Special Sessions directly to the CGU Executive, to CGU-HS or, if appropriate, through the E & S Committee. Any suggestions

for conference sessions and other activities that would connect geomorphology to the existing and future activities of CGU are welcome especially if it helps to raise the profile of geomorphology as a geophysical science

in Canada.

Peter Ashmore

## RESEARCHER PROFILE

### Dr. Patrick Lajeunesse

Patrick grew up in various parts of Québec and Ontario. He graduated from high school in Magog and from CEGEP in Sherbrooke, in southern Québec. He began his academic career at the Université de Sherbrooke, where he earned a BSc (Géographie) in 1993 and an MSc (Géographie) in 1996. After completing a PhD (Géographie) at the Centre d'Études Nordiques at Université Laval in 2000, he left the province to undertake a postdoctoral fellowship at the University of Alberta (Earth and Atmospheric Sciences) until the end of 2002. His first appointment as a faculty member was at the Université du Québec à Rimouski in early 2003. Since 2004, he has been an assistant-professor at Université Laval in the Department of Geography where he teaches different courses in geomorphology. He says that what first led him to develop an interest in the study of sediments and landforms comes from moving so many times as a child; a situation that usually made him wonder why the ground he played in changed so much in texture from one hometown to another.



### Research Interests

Patrick's research interest for the geomorphology of the north was initiated during his MSc research project on a geomorphological mapping project of the Schefferville area (central Québec-Labrador) that he realized with Dr. Hardy Granberg (Sherbrooke). During his PhD project at Laval with Dr. Michel Allard (Laval), he developed his interest for Quaternary geology and geomorphology by studying deglacial dynamics, glaciomarine sedimentation and postglacial emergence in eastern Hudson Bay. After this project, he shifted his research study area to the western Canadian High Arctic, where he studied the glacial and relative sea-level record of Melville, Loughheed and Cameron islands during his postdoctoral fellowship with Dr. John England (UofA). This research project focused upon the definition of ice extent during the Last Glacial Maximum as well as the past and modern trends of relative sea-level change.

Patrick's NSERC funded research program focuses upon the Quaternary geological and geomorphological evolution of high-latitude coastal regions. In one project, he is working on the Holocene coastal evolution of Southampton Island in collaboration with Dr. Reinhard Pienitz (Laval). This project aims to reconstruct the glacial/deglacial and relative sea-level history of



northern Hudson Bay as well as to investigate the modern dynamics of an emerging permafrost coastline in a context of rapid climate change, a study that is also being supported by ArcticNet.

In a second project, he is collaborating with Drs. John-Hugues Clarke (UNB), Guillaume St-Onge (UQAR) and Anne de Vernal (UQAM) to study the Holocene and modern evolution of the Hudson Bay seafloor from multibeam bathymetry and acoustic stratigraphy surveys and



sediment cores. This work will be undertaken in September 2005 during a research cruise of the CCGS Amundsen in Hudson Bay under the ArcticNet project. On a third project, in collaboration with Drs. Jacques Locat (ULaval), Guillaume St-Onge and André Rochon (UQAR), he investigates the Quaternary geological and geomorphological record of the Gulf of St.-Lawrence seafloor using the same techniques.

Patrick's plans for the future are to continue to investigate the terrestrial and marine landscape by mapping new sectors of the Canadian northern coastal zones.

## UPCOMING MEETING

### Tephra Rush 2005

The INQUA Subcommittee on Tephrochronology and Volcanology is holding its next International Field Workshop and Conference in Dawson City, Yukon Territory, Canada, July, 31st to August 8th, 2005. This meeting includes three days of field excursions in the Klondike Goldfields and central Yukon Territory.

The field excursion will provide a unique insight into the volcanic history of Yukon and Alaska and the technical sessions will enable the discussion of pioneering new methods and results from other parts of the globe within the broad themes of the meeting. Multidisciplinary researchers are keenly encouraged to attend.

The meeting will be convened by Duane Froese (University of Alberta) and John Westgate (University of Toronto). Field Workshop & Conference related information can be found at the website listed below.

<http://conferences.eas.ualberta.ca/tephrarush2005>

Please note that attendance is limited to 60 participants on a first come-first-serve basis... so we urge you to register for this event as soon as conveniently possible. The Field Workshop and Conference promises to be an excellent and informative meeting.

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## CALENDAR

**CAG Meeting**, University of Western Ontario, London, May 31-June 4  
<http://geography.ssc.uwo.ca/cag/index.htm>

**CANQUA Meeting**, Winnipeg, June 5-8  
<http://www.umanitoba.ca/canqua/>

**IAG Meeting**, Zaragoza September 7-11, 2005

The meeting includes a interesting range of pre- and post-conference field trips. Information at [www.geomorph.org](http://www.geomorph.org)

**River Coastal and Estuarine Morphodynamics (RCEM) 2005**, October 4-7, 2005, Urbana, Illinois, USA. Information at <http://www.conferences.uiuc.edu/conferences/conference>

## LINKS TO WEBSITES

American Geophysical Union  
<http://www.agu.org>

AQQUA  
<http://cgcq.mcan.gc.ca/aqqua/>

Association of American Geographers  
<http://www.aag.org>

British Geomorphological Research Group  
<http://boris.qub.ac.uk/bgrg>

CANQUA  
<http://www.mun.ca/canqua/>

Canadian Geophysical Union  
<http://www.cgu-ugc.ca>

European Union of Geosciences  
<http://eost.u-strasbg.fr/EUG>

Geological Society of America  
<http://www.geosociety.org>

Geomorphology Speciality Group Homepage  
<http://www.cla.sc.edu/geog/gsgdocs>

International Association of Geomorphologists  
<http://www.geomorph.org>

International Association of Sedimentologists  
<http://www.blackwell-science.com/uk/society/ias>

International Union for Quaternary Research  
<http://inqua.nlh.no>

NSF – Geography and Regional Science  
<http://www.nsf.gov/sbe/bcs/geograph/start.htm>

Ouranos – Consortium en Changements climatiques au Québec  
[www.ouranos.ca](http://www.ouranos.ca)

Quaternary Geology and Geomorphology Division – Geological Society of America  
<http://www.ocean.odu.edu>

## **CGRG EXECUTIVE 2004-2005**

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## **CONTRIBUTIONS TO FUTURE CGRG NEWSLETTERS**

The CGRG newsletter is published twice annually. As with all such newsletters, its success is directly dependent on the contributions that we receive. CGRG welcomes contributions to future newsletters from any of our members. These should be of interest to the Canadian geomorphology community and could include discussions, commentaries, photographs, reviews of regional or national meetings and field trips, summaries of issues pertinent to geomorphology, and announcements of future meetings and workshops. We will also be profiling research groups, students and members of our group in future issues. Suggestions for future profiles are most welcome. Please forward your contributions to: [lamoureu@post.queensu.ca](mailto:lamoureu@post.queensu.ca)

CGRG was established in 1993 at the International Association of Geomorphology Congress in Hamilton, Ontario. It provides a strong voice for geomorphology in Canada. Its objectives are to advance the science of geomorphology in Canada by 1) organizing and sponsoring technical sessions, workshops, and field trips, 2) publishing newsletters twice a year, 3) operating a listserver (CANGEORG) which maintains a comprehensive bibliography of Canadian geomorphological, Quaternary, and environmental geoscience publications, 4) supporting publication of technical reports and field guides, 5) presenting the J. Ross Mackay Award in recognition of a significant achievement by a young geomorphologist in Canada, and 6) cooperating with related earth science associations within Canada (GAC, AQQUA, CAG, CANQUA). We encourage all earth scientists with an interest in geomorphology to join CGRG

## CANADIAN GEOMORPHOLOGY RESEARCH GROUP

### Registration Form

**2005**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Postal Code: \_\_\_\_\_

Phone numbers: (Home) \_\_\_\_\_ (office) \_\_\_\_\_

e-mail address: \_\_\_\_\_

Institution: \_\_\_\_\_

Annual dues: \$15

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Please make cheque or money order to the Canadian Geomorphology Research Group

(Photocopy application form as necessary)

Send completed form and cheque to: Kevin Driscoll, Secretary-Treasurer, 71 Equestrian Drive, Kanata, ON, K2M 1H7