Animal Care

Organizational Structure and Highlights

With Jonathan Spears (UPEI/AVC) as Chair, this Committee is comprised of representatives from member institutions that have close affiliation with their respective Institutional Animal Care Committees. Of note, the Committee would like to acknowledge the tremendous and long-standing contribution of Dr. Sylvia Craig who has retired from Dalhousie as the Director of Animal Resources and the Dalhousie representative on this Committee. We wish her well in retirement.

Current Committee Actions

The unofficial mandate for the Committee is to address the directives and recommendations of the Canadian Council on Animal Care as they relate to institutions with small Animal Care and Use Programs as found commonly in Atlantic Canadian institutions. The primary issue being addressed currently is the requirement to provide Scientific Merit Review of animal use protocols for projects not funded by peer review agencies. The problem for institutions with small numbers of animal-based researchers is a relative lack of reviewers carrying appropriate expertise, yet not connected to the project to be reviewed. To resolve this, the Science Atlantic Animal Care Committee is creating a database of reviewers from across the Atlantic Canadian academic institutions.

Background

The Canadian Council of Animal Care (CCAC) requires all research projects involving animals be subject to review for scientific merit prior to an institutional Animal Care Committee (ACC) granting final approval. In the majority of cases, the process of scientific merit review is carried out by a granting agency when funding competitive applications. On occasion, projects are presented to an institutional ACC without a formal review process, for example, if a project is funded from internal monies or from industry contracts. In these cases, the CCAC requests that the institutional ACC obtain internal and/or external reviews from at least two knowledgeable scientists that do not collaborate with the applying investigator and at least one of which is external to the ACC. This requirement has created problems for smaller institutions in Canada as there are typically so few scientists involved in animal based research within a particular field at the University. The problem is often compounded as most of our animal users actively sit on the institutional ACC, leaving very few potential reviewers with appropriate expertise within the institution.

Activity and Actions

a) Since the last meeting on October 4, we have finalized the Policy and Procedures and we are waiting for final approval at the April 29th meeting. The concerns raised over the process include maintaining confidentiality for reviewers and Principle Investigators, and limiting the number of requests for individuals to provide review.

b) A letter of invitation to potential reviewers has been circulated to representatives of member institutions to recruit potential reviewers. Each campus will create their own mechanism for
administration of the Scientific Merit Review (based on the collective experience of the Science Atlantic Animal Care Committee) and tap into the database of reviewers as required.

c) UPEI has officially assigned an administrative support person to populate and maintain the list of reviewers for at least the first year prior to being passed on to another member institution.

Future Activities

The Committee has started to address the issues and regulatory factors involved in the use of Genetically Engineered Animals in research, teaching and testing for Science Atlantic Member Institutions.

The Committee welcomes other concerns regarding animal care that are common to member institutions. The collective experience of Science Atlantic member institutions in assisting individual Universities with their issues is proving to be an invaluable resource.

Respectfully submitted,
Jon Spears, Chair

Aquaculture & Fisheries

23rd Annual Science Atlantic Aquaculture and Fisheries Conference

The primary focus of the Aquaculture and Fisheries Committee of Science Atlantic is to organize an annual student conference in March. We did this along with both the Biology and Environment Committees at Acadia in 2013 and the decision was made to help MSVU with next year’s conference because MSVU does not have a representative for Aquaculture & Fisheries. This year, three concurrent sessions constituted the triple-threat conference at Acadia held March 15-17, 2013. The conference was organized, managed, and overseen by the ever pleasant and capably Will Roberts who deserves many thanks and loads of credit for his efforts!!

The 23rd Aquaculture & Fisheries student conference was open to both undergraduate and postgraduate students. This year 21 students presented which was a slight decrease from last year (23), but still greater than the recent mean (mean 2009-2012 ≈ 21). Noticeably absent were student participants from Mount Allison, St. Francis Xavier (potentially due to their recent faculty strike), Saint Mary’s University, University of New Brunswick, St. John & Fredericton, and Université de Moncton, but we saw a healthy return with University of Prince Edward Island (Table 1). Representatives were in attendance from St. FX and MSVU despite not having students and several apologies were sent for other representatives that could not attend. This will help ensure that the Aquaculture & Fisheries Committee message will be relayed for future conferences. All institutions will be contacted for the 24th Conference to be held at Mount Saint Vincent University in 2014.
Table 1: Participant institutions and number of students

<table>
<thead>
<tr>
<th>University</th>
<th># Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acadia University</td>
<td>4</td>
</tr>
<tr>
<td>Cape Breton University</td>
<td>1</td>
</tr>
<tr>
<td>Dalhousie University – Agriculture</td>
<td>4</td>
</tr>
<tr>
<td>Dalhousie University – Science</td>
<td>5</td>
</tr>
<tr>
<td>Memorial University</td>
<td>4</td>
</tr>
<tr>
<td>University of PEI</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

It is now well established that this conference has a dual focus of aquaculture and fisheries and this was duly reflected in the breadth of presentations spanning fisheries modeling to feed responses in cultured species. Students were roughly a 50:50 split between undergraduate and post-graduate presenters, but this year few students made the trip to support their fellow classmates and/or to broaden their horizons.

The Committee thanks our fundraising organizer Dr. Tillmann Benfey for, once again, encouraging all representatives to seek funding support. Our sponsors responded with $3,400 in support with returning sponsors from the aquaculture and fisheries sectors (Table 2). We also thank Science Atlantic for their financial contribution to the conference awards.

Table 2: 2013 Sponsor affiliations

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Aquaculture</th>
<th>Fisheries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic Elver Fishery, Inc.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Canadian Centre for Fisheries Innovation</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Clearwater</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cooke Aquaculture</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Novartis Animal Health</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Skretting</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Valox Ltd.</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Plus Canadian Science Publishing and Science Atlantic provided further funds for awards.
Conference Awards

**Best Overall Presentation**  
Canadian Science Publishing Communication Award: Jordan Poley, UPEI

**Awards for Best Graduate Student Presentations**  
1st place Clearwater / Novartis Animal Health Canada Award: Jordan Poley, UPEI  
2nd place Canadian Centre for Fisheries Innovation Award: Greg Britten, Dal  
3rd place (Tie) Skretting Award: Jessica Fry, MUN; Danielle Quinn, Acadia

**Awards for Best Undergraduate Student Presentations**  
1st place Clearwater / Atlantic Elver Fishery / Science Atlantic Award: Adam Harding, Dal  
2nd place Cooke Aquaculture Award: Ryan Horricks, Dal  
3rd place Valox Award: Daniel Oldford, Cape Breton University

**Student Travel Awards**  
Four awards to MUN students in recognition of disproportionate costs to travel from NL  
Recipients: Mark Earle, Jason Lewis, Jessica Fry, and Sabrina Inkpen

Committee Meeting

Key discussion points at Aquaculture & Fisheries Committee meeting #42 15 March 2013

1. **Distribution of Awards and Travel**  
   There are year-to-year variations in conference attendance, sponsors (and funds), and requests for travel as well as variations in amounts of travel funds requested/required by students. It was decided to keep the current practice of attempting to help as many students as possible with travel, and to distribute awards (and travel fund sponsorship to CCFFR and AAC) on a Committee-based decision basis to maintain flexibility.

2. **Posters vs. Oral Presentations**  
   Due to an initial increase in students wanting to present, it was discussed whether the addition of posters to A&F would be a good idea. It was decided to make every effort to have only oral presentations.

3. **MSVU Hosting 2014 Conference**  
   Christophe Herbinger (Dal) and Tim Frasier (SMU) will be helping MSVU with the conference in 2014.

Respectfully submitted,  
Trevor Avery, Chair

Biology

The change in the way that award moneys are distributed created confusion at this year’s meeting. Science Atlantic now retains the awards amount from the annual allotment to the Committee rather
than the Committee taking it out of the conference budget. The amount retained by Science Atlantic this year was less than the amount of cash prizes allotted last year.

To avoid this confusion, the Committee wishes to put forth a recommendation of the following amounts for next year’s awards based upon a post conference poll of its members: $150, $100 and $50 for both orals and posters for a total of $600. With the exception of 2013, these were the amounts allotted in the past two years. The Chair also recommends that the awards be an integral part of the conference budget preparations in the fall, with a listing of contact information for any additional awards other than those disbursed by Science Atlantic and the responsible party for follow up after the conference.

We had a unique situation in regards to this year’s conference. We had students from the Department of Microbiology & Immunology in the Faculty of Medicine at Dalhousie University wishing to attend the conference. We have no previous expression of interest from any medical school in the past and this year’s interest apparently was the result of a Google web search. The result was that we had four students apply, initially with no identified stream with no awareness of student quota numbers per institution. The quotas were put in place for various reasons related to judging of participants: the number of available judges, the amount of time to do the judging and to lessen the probability of any institution being awarded most of the prizes by sheer weight of numbers.

The Biology Committee would like to put forth to Council the recommendation that the Department of Microbiology & Immunology in the Faculty of Medicine at Dalhousie University be allotted institutional status within our Committee with an allotment of four competing students, 2 for orals and 2 for posters, with the understanding that a faculty rep will attend the meetings of the Committee and with a solid commitment to assist with judging at the conference. Institutions may submit more than two students for the poster session but must decide in advance which two will be participating in the competition (this is a fundamental change from the past, where there were no non competing posters).

The Biology Committee also believes that Council may wish to consider whether an open offer should be made to other members having a Faculty of medicine either now or perhaps in the future.

Future conferences will list up front who can participate and the quotas, to avoid a reoccurrence of this predicament.

The Biology Committee has three ongoing projects: an update to program requirements (the information has been collected and is currently being compiled, led by Dr. Bob Hooper, Memorial), a field course listing (led by Dr. Bob Hooper) and a graduate student speaker tour (an operations plan is being prepared by Dr. Michael Stokesbury).

**Conference Awards**

*Oral*

1st place: Abigail White, Mount Allison University
2nd place: Julie Colpitts, Acadia University
3rd place: Katie Kowarski, Dalhousie University

**Poster**
1st place: Shane Rajaraman, Saint Mary's University
2nd place: Yueyang Zhang, University of New Brunswick, Saint John
3rd place: John Loggie, Mount Allison University.

**Science Atlantic Communication Award**
Oral: Feng Tang, University of New Brunswick, Saint John
Poster: Jason McConnery, Dalhousie University

**Botany Award**
Oral: Michelle MacDonald, University of Prince Edward Island
Poster: Simon Lay, Dalhousie University

Respectfully submitted,
Alyre Chiasson, Chair

**Chemistry**

**Next Conference Information**

The 38th annual student undergraduate chemistry conference (ChemCon 2013) will be held at Memorial University of Newfoundland May 21st to 23rd 2013. Conference is now open for registration and call for papers (http://scienceatlantic.ca/ocs/chem/index.php/chem/chemcon13/index) from the Science Atlantic web site. Dr. Chris Flinn will be the faculty representative. Chris has organized the conference dates so that there is no overlap with graduation. The Chemistry AGM will be held at the conference, however, Ray (Chemistry Chair) will not be able to attend (due to parental commitments) and Chris will chair the AGM.

**Speaker Tour Program**

The Science Atlantic/CIC Tour speaker for 2013 is Sara Eisler (UNB Fredericton) to speak at Mt Allison, Acadia and Memorial. As Memorial is not part of the CIC Maritime CIC we covered the total costs for her travel to Memorial.

**Committee Business**

Co-Chair TBD.

Our Chemistry Committee Holding Account is still around $5,000. We have and are still willing to support events that fall within the Science Atlantic mandate.

Respectfully submitted,
Ray Syvitski, Chair
Computer Science

No new business since November 2012 report to Council.

Earth Science

Conference and Award Winners

The 62nd AUGC was held at Dalhousie University on 18-20 October 2012. The Dalhousie AUGC Committee was the first to use the new online registration procedures which worked reasonably well. There were 18 oral and 7 poster presentations. Abstracts of papers and posters were subsequently published in Atlantic Geology (48, 124_136 (2012)). The organizing Committee arranged for recognition of the 50th anniversary of APICS/Science Atlantic at the 2012 conference at Dalhousie, by inviting prominent Atlantic region scientists Bob Ryan (NSDNR) and Sandra Barr (Acadia) who have APICS and AUGC connections in the past, to speak in place of a keynote speaker. The conference included four field trips,

Best Overall Presentation won by Marina Joury (MUN); Best Poster Award won by Tara Forstner (Dal); CSPG Award won by Lianabel Selviz (MUN); Frank Shea Memorial Award won by Aaron Bustard (UNB-F); and the CSEG Foundation Award won by Lianabel Selviz (MUN).

Registered attendance was 125. The total budget was $27,366.84 with a small deficit subsequently covered with an additional donation. Sponsors included Imperial Oil, Canadian Society of Exploration Geophysicists, PotashCorp, Shell, ExxonMobil, Dalhousie Science Society, Canadian Society of Petroleum Geologist; Sigma, Atlantic Geoscience Society; Science Atlantic; Dalhousie University, and Dalhousie Earth Sciences Department.

The next AUGC will be held at St. FX from October 17-19, 2013 hosted by the Fairbault Geological Society. The 2014 conference will be held at UNB Fredericton.

Speaker Tour

The 2012/13 speakers tour had 2 speakers. Trevor McHattie, (NS DNR Geological Resources Branch) spoke on *Mantle plume dynamics and the chemical and thermal structure of the Archean mantle: Evidence from mafic_ultramafic volcanic successions within the ca. 2.7 Ga Prince Albert Group, Nunavut, Canada* November 26 at St. FX, November 27 at Dalhousie, and November 29 at MUN. Penny Morrill (MUN) spoke on *Sourcing Methane on Mars: How Can Sites of Present Day Serpentinization on Earth Direct the Search for the Source of Martian Methane* February 26 at SMU, February 27 at Acadia, and February 28 at UNB Fredericton.

Committee Membership

Milton Graves (Dalhousie) replaced Brendan Murphy (St. FX) as Chair in February. Jacob Hanley (SMU) is the Speaker Tour Coordinator.

Committee Business
Committee meetings were held on October 27, 2012 in conjunction with the Atlantic Undergraduate Geology Conference in Halifax and on February 2, 2013 in conjunction with the Atlantic Geoscience Society Annual Colloquium in Dartmouth, NS.

Respectfully submitted,
Milton Graves, Chair

Environment

Spring 2013 Student Conference (March 15-17, Acadia University)

This year we held a joint conference with the Science Atlantic Biology and Aquaculture & Fisheries Committees, co-organized by Trevor Avery, Mike Stokesbury, Nelson O’Driscoll and William Roberts (student organizer) from March 15-17, 2013. It was an excellent meeting with over 142 registrants (with 38 registered for the Environment sessions). There were 17 oral presentations and 13 poster presentations made by undergraduate and graduate students from Dalhousie, St. FX, Acadia, Mount Allison, UPEI, UNB, and MUN. Faculty attendance was good (7), with representatives from Acadia, Dalhousie, MUN, St. FX and UPEI. The presentations were all of very high quality, and four awards were presented:

Conference Awards

The award categories and winners were as follows:

**Science Atlantic Undergraduate Research Award**
Oral: Jacqueline Caverhill (Mount Allison)
Oral, hon. mention: Olivia Kester (St. FX)
Poster: Tiffany Vass (Dalhousie)
Poster, hon. mention: Garry Dart (MUN)

**Science Atlantic Communication Award**
Oral: Adam Godfrey (Acadia)
Oral, hon. mention: Connor Leggott (UPEI)
Poster: Heather Crozier (Dalhousie)

**K.C. Irving Environmental Science Centre Award**
Chelsea Fougere (St. FX)

Science Atlantic Best Graduate Presentation Award
Catherine MacNeil (UPEI)

Science Atlantic Environmental Committee Meeting (March 2, Mount Allison University)

On the Friday night of the student conference, our Committee met formally to discuss several issues. Present were: Carolyn Peach Brown (UPEI); Nelson O’Driscoll (Acadia); Gordon Brewster (Dalhousie); David Burton (Dalhousie); Daniel Rainham (Dalhousie) and Lois Whitehead (SA).
Committee business centred around discussion of: 1) an update on conference attendance and student representation from member universities 2) judging responsibilities and evaluation forms; 3) stimulating interest and engagement in SA student conferences; 4) the lack of social-science presentations focused on environmental issues at our conferences; and, 5) the use of holding account funds and conference funds. It was noted that a decision was made to hold the next Joint conference (with Biology and Aquaculture) at MSVU which, at present, does not have a representative on the Environment Committee. A discussion about where, when and what format would be best for the Committee took place and no decisions have been made for 2014. There is interest in expanding the mandate of the conference to integrate industry, NGO, government and academic interests and how best to accommodate these interests in a student-focused conference format. Communication issues present a challenge, especially in engaging students before 4th year, how best to involve student societies found at many of the member universities, and in promoting environmental study and research in both science and social science disciplines. The Committee has close to $4k in the Holding Account and $300 was allocated to a MUN student for travel to Acadia. It was agreed in principle that the annual SA contribution towards conference organization be returned to SA to support centralization of conference organization activities. A meeting will be organized to engage other members of the Environment Committee to focus on planning of the 2014 conference. Location is TBD.

**Committee Membership**

We are missing representation from CBU and it does not appear that NSCC is involved with SA.

Respectfully submitted,
Daniel Rainham, Chair

**Mathematics & Statistics**

**Conference**

Our last conference was held in October 2012 at Mount Allison University. Information on that meeting was made in our last report to Council. The next conference will be held in October 2013 at University of Prince Edward Island.

**Other activities**

- We have begun the process of collecting and archiving old documents (conference booklets, agendas, minutes, other) relevant to the Committee.

- We have had ongoing discussion with AARMS (Atlantic Association for Research in the Mathematical Sciences) and are close to finalizing an agreement where they provide major funding on a long-term basis to the annual conference. AARMS would then become a named sponsor of the conference.

Respectfully submitted,
Gordon MacDonald, Chair
Conference

The most recent undergraduate conference (AUPAC 2013) was held at the Université de Moncton in Moncton, New Brunswick, Feb. 1-3, 2013. Julien Légère was the head of the student organizing committee and the emcee. The Friday and Saturday keynote presentations, graduate school fair, and banquet were all held at the Crowne Plaza in downtown Moncton. Students talks, Saturday afternoon invited talk, and lab tour were all held in the Rémi-Rossignol building on the Université de Moncton campus. There were 90 undergraduate delegates and 12 faculty delegates. There were representatives from 10 graduate schools/institutes. Student traffic at the grad fair was strong (at least 30 students for 30 minutes).

There were 35 student presentations and 7 prizes in total. Winners were David Lake (1st prize, $300, funded by Science Atlantic), John Niven (2nd prize, $200, SA), Patricia Oliver (3rd prize, SA), and Logan Montgomery ($200, Communication Award as voted by students, funded by Canadian Science Publishing). Special topic awards were from ACEnet for the best computational modelling talk (Taylor Dunn, $100) and two prizes for photonics research [Nicolas Pierre LeBlanc ($200) and Mathew Britton ($100)] sponsored by LamdaGuard Photonique and Science Atlantic.

The invited speakers were Ruben Sandapen (Université de Moncton), Jean-Francois Bisson (Université de Moncton), and Jeff Dahn (Dalhousie). Dr. Sandapen opened the conference with his talk on new approaches to hadron physics using the light-front Schrödinger equation. Dr. Bisson’s talk on laser machining was in English and French. Dr. Dahn’s talk on Li-ion batteries highlighted the important contributions that his students have made to his research.

Sponsors included LamdaGuard, the Crowne Plaza, Université de Moncton, GCMP (Groupe de recherche sur les couches minces et la photonique), Association Étudiante de la Faculté des Sciences de l'Université de Moncton (AEFSUM), and Science Atlantic/Atlantique.

Next year’s conference will be held at Saint Mary’s University.

Speaker Tour

I also served as the Canadian Association of Physicists Lecture Tour coordinator for the Atlantic Region. Blair Jamieson (University of Winnipeg) spoke at Acadia (Feb. 27), Dalhousie/Saint Mary’s (Feb. 28), and the UNB (Mar. 1). His talk was titled Discovering the Properties of Ghosts: Experiments with Neutrinos. Ruben Sandapen (Université de Moncton) spoke at Memorial University (March 7) and Grenfell Campus (March 8). His talk was titled Could the Hadron be the Hologram of a Vibrating String in a Fifth Dimension? Chris Wilson (Waterloo) spoke at Université de Moncton (March 25), Mount Allison (March 26), UPEI (March 26), and St. FX (March 27). His talk was titled Creating Light From Vacuum: The Dynamical Casimir Effect. Our Committee is contributing our usual $800 plus $200 from our Holding Account to cover extra costs for the Newfoundland leg of the tour.

Committee Membership

Carl Adams (St. FX) began as Chair of the Committee this February. Doug Dahn (UPEI) is serving as Secretary. The Committee thanks Bryan Latta (Acadia) for his service for the past two years.

Spring Committee Reports, April 19-20, 2013

www.scienceatlantic.ca
Respectfully submitted,
Carl Adams, Chair

**Psychology**

No new business since November 2012 report to Council.