


Science  Atlantic  
connecting science education and research

# 2014-15 Annual Report





**Science Atlantic** is a charitable association of 17 post-secondary and research institutes in Atlantic Canada with a mandate to advance science education and research at the undergraduate level.

**The mission of Science Atlantic** is to advance post-secondary science education and research in Atlantic Canada by:

- Providing opportunities that foster and enrich students
- Supporting and inspiring researchers and educators
- Using our collective voice to address important regional science issues

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Professor, Department of Earth and Environmental Science  
Acadia University

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I am excited to share our 2014-15 Annual Report with you!

With your support, Science Atlantic provided another year of conferences, speaker tours, and awards for approximately 1,000 students and faculty in Atlantic Canada. As well, we've continued working on our newest project, the Atlantic Facilities and Research Equipment Database (AFRED). Please read more about these activities in the following report.

We've also taken this opportunity to share with you the many ways students contribute to Science Atlantic. Over the past year, five co-op students have been hard at work making improvements to conference planning resources for volunteers, developing the marketing materials and database structure for AFRED, enhancing our communication and outreach efforts, and more.

Thank you for your continuing membership, donations, and sponsorships, as well as for volunteering your time and skills. Our many projects and activities would not be possible without the support of our sponsors, faculty representatives, students, deans, and others involved with Science Atlantic.

Please take a moment to read this year in review and see the hard work and contributions of you and your colleagues, and to reflect on the vision of a robust research and education environment that your involvement is helping to create.

A handwritten signature in cursive script that reads "Lois Whitehead".

Lois Whitehead  
Executive Director

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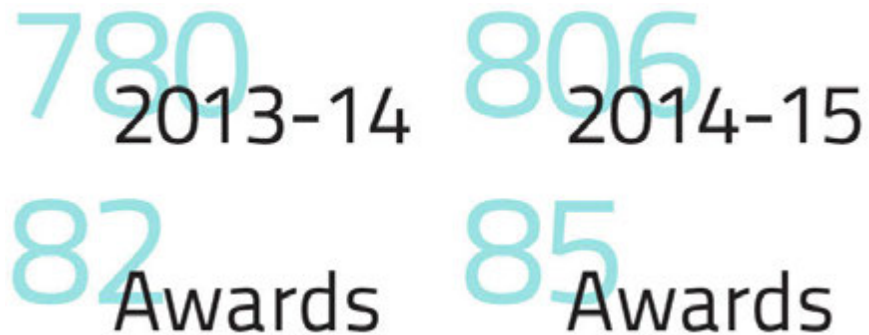
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# Conferences

Science Atlantic hosts a number of annual disciplinary and interdisciplinary academic student conferences, coordinated by volunteer teams of professors and students. While all conferences have in common the opportunity for students to present their research, many conferences also have unique aspects, including field trips, industry events, and competitions.

## Conference Attendance



## Our Annual Conferences

ChemCon MSCS AUGC  
AUPAC Psychology AFB  
Environment

- Science Atlantic Aquaculture & Fisheries and Biology Conference (AFB)
- Atlantic Universities Geoscience Conference (AUGC)
- Science Atlantic - CIC Chemistry Conference (ChemCon)
- Science Atlantic Environment Conference
- Science Atlantic Mathematics, Statistics and Computer Science Conference (MSCS)
- Atlantic Universities Physics & Astronomy Conference (AUPAC)
- Science Atlantic Psychology Conference



# Awards

Awards are given at each student conference to recognize exceptional research and science communication skills. Additionally, a number of awards specific to each discipline are sponsored by industry as well as various academic and research societies.

## Student Highlights



Emily Peters presenting her research

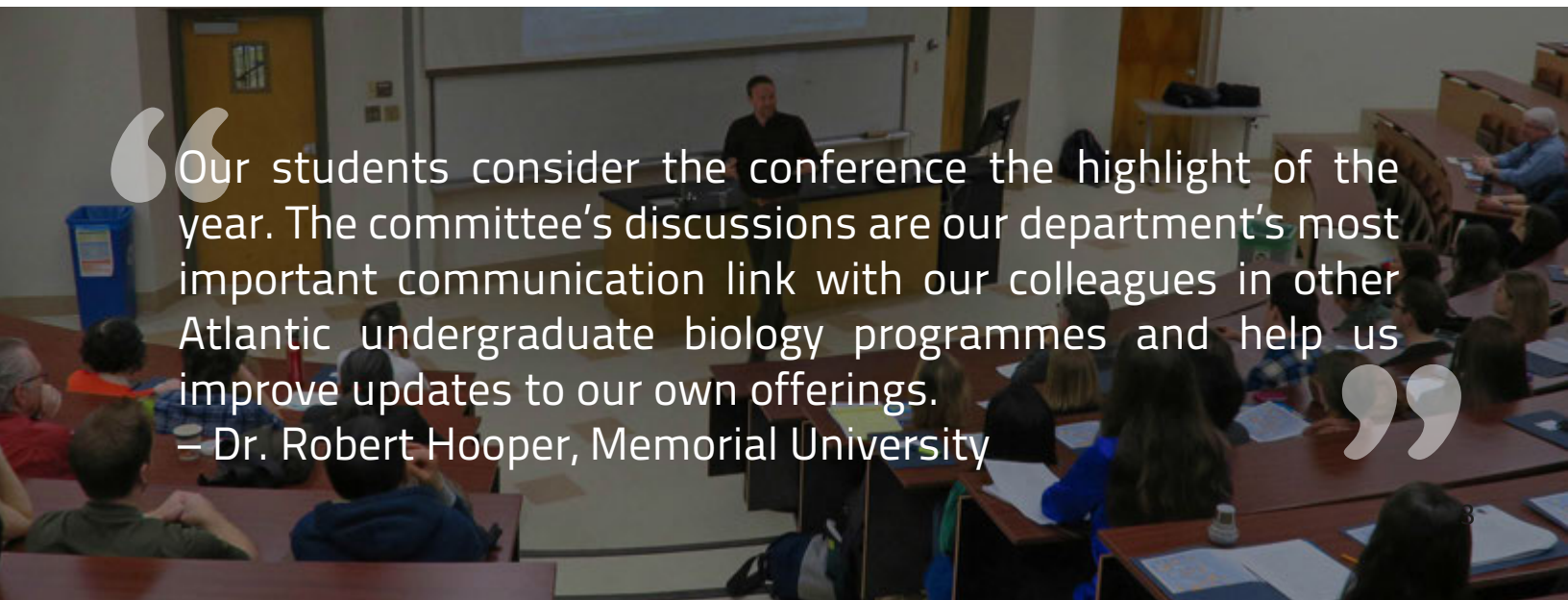
At the March 2015 Environment Conference, Emily Peters, Saint Mary's University, was awarded the Science Atlantic Science Communication Award, sponsored by Canadian Science Publishing (CSP), for her outstanding oral presentation, "*Utilization of growth-promoters in *Arundo donax*.*"

Regarding the importance of science communication, Emily says, "Participating in conferences are great experiences to really learn the relevance of specific research endeavours ... and how important others think [the research] is."

As part of the award, Emily also had the opportunity to write a blog post on the CSP website about her biofuel research. The blog post can be found at [www.sciatl.org/EmilyPeters](http://www.sciatl.org/EmilyPeters).

“Our students consider the conference the highlight of the year. The committee’s discussions are our department’s most important communication link with our colleagues in other Atlantic undergraduate biology programmes and help us improve updates to our own offerings.”

– Dr. Robert Hooper, Memorial University



# Student Conference Award Winners

## **Undergraduate Research Award**

Daniel Abarbanel (DAL), Physics & Astronomy  
Andrew Cameron (UPEI), Physics & Astronomy  
Jonathan Cunningham (StFX), Psychology  
Dylan Day (Acadia), Mathematics & Statistics  
Brandon Doherty (UNB), Mathematics & Statistics  
Kelly Foran (MtA), Physics & Astronomy  
Marley Geddes (DAL), Environment  
Jordan Gibson (Acadia), Chemistry  
Monique Goguen (UNB), Environment  
Peter Graves-Akerley (SMU), Mathematics & Statistics  
Laryssa Halat (StFX), Biology  
Gregory Haller (MSVU), Biology  
Zhengcheng He (UPEI), Biology  
Zhouqin (Mary) He (StFX), Mathematics & Statistics  
Kathleen Hipwell (SMU), Biology  
Jillian Leigh Kendrick (DAL), Earth Science  
Karen Korstanje (MtA), Computer Science  
Maryani Lasmana (UNB), Psychology  
Krista Latimer (UNB), Aquaculture & Fisheries  
Rejean Leblanc (MtA), Mathematics & Statistics  
Trevor McGrath (SMU), Chemistry  
Simon Meynell (DAL), Physics & Astronomy  
Federico Mora (MtA), Computer Science  
Kathleen O'Donnell (UNB), Aquaculture & Fisheries  
Zoe O'Malley (UNB), Biology  
Sasha Power (SMU), Biology  
Joshua Quinlan (MUN), Psychology  
Ashley Robinson (SMU), Chemistry  
Emily Rosta (CBU), Mathematics & Statistics  
Anna Scheidler (STU), Psychology  
Nicole Shanahan (MUN), Environment  
Mariah Martin Shein (MtA), Computer Science  
Jon Smith (Acadia), Mathematics & Statistics  
Matt Trace (Acadia), Mathematics & Statistics  
Matthew van Bommel (Acadia), Mathematics & Statistics  
Sarah Van de Reep (StFX), Aquaculture & Fisheries  
Nikita Volodin (UPEI), Computer Science  
Yuhuai Wu (UNB), Mathematics & Statistics

## **Science Communication Award, sponsored by Canadian Science Publishing**

Philip Aucoin (MSVU), Psychology  
Michael Buckland-Nicks (SMU), Environment  
Catherine Gallagher (StFX), Psychology  
Laryssa Halat (StFX), Biology  
Kyle Marshall (Acadia), Physics  
Emily Peters (SMU), Environment  
Christopher Small (UNB), Aquaculture & Fisheries  
Matthew Timm (MSVU), Chemistry

## **Graduate Research Award**

Alicia Cassidy (UdeM), Aquaculture & Fisheries  
Scott Harroun (SMU), Chemistry  
Marie-France Jones (UNB), Environment  
Reem Karaballi (SMU), Chemistry  
Jing Lu (DAL), Aquaculture & Fisheries  
Sarah MacLeod (DAL), Environment  
Jennifer Murphy (MUN), Chemistry  
Kieran Murphy (StFX), Aquaculture & Fisheries  
Graeme Soper (SMU), Chemistry

## **ACEmat Award, sponsored by ACENET**

Alexander Rudiuk (CBU), Chemistry  
Hong Yi Shi Yang (DAL), Physics & Astronomy

## **Canadian Botanical Association Award**

Michael Buckland-Nicks (SMU), Biology  
Hardy Storm (UPEI), Biology

## **Chemical Institute of Canada Undergraduate Awards**

Kori Andrea (CBU)  
Grant Charlton (UNB)  
Kirstin Doyle (SMU)  
Chris Frazee (UNB)  
Charlotte Fuller (Acadia)  
Teles Furlani (MUN)  
Marc Hetu (Acadia)  
David Hogan (MUN)  
Sasha Power (SMU)  
Mitch Pinto (Acadia)  
Matthew Roy (UNB)  
Alex Veinot (Acadia)

## **Canadian Society of Exploration Geophysicists Award**

Andrew Blagdon (MUN), Earth Science

## **Canadian Society of Petroleum Geologists Award**

Dillon White (SMU), Earth Science

## **E. Gordon Young Award**

Luke Murphy (SMU), Chemistry

## **Frank Shea Memorial Award**

Nikolett Kovacs (MUN), Earth Science

## **Imperial Oil Best Poster Award**

Haley LeBlanc (SMU), Earth Science

## **Karen Nicholson Award in Neuropsychology**

Morgan Johnson (DAL), Psychology

## **Computer Science Programming Competition**

First: E. MacNeil, C. Madsen, S. Scott (MtA)  
Second: J. Blanchard, A. Gordon, B. Smith (UNB)  
Third: T. Blair, R. Bronfman-Nadas, A. Zinck (DAL)

## **Mathematics Problem Solving Competition**

First: Dylan Day, Matthew van Bommel (Acadia)  
Second: John MacMillan, Kathleen MacMillan (MtA)  
Third: Christopher Parly, Brandon Throne (MUN)



# Hall of Fame

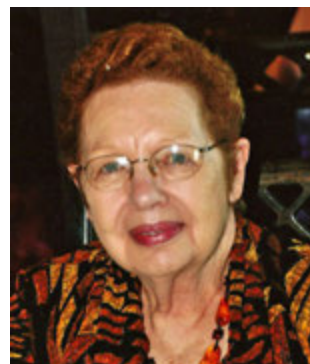
The Hall of Fame was created in 2012, in honour of Science Atlantic’s 50th anniversary, to recognize current and former members who have shown exemplary service to the organization, as well as alumni who can trace the start of their careers to an influential experience as a student at a Science Atlantic or APICS event.

The categories for recognition are Outstanding Member, Outstanding Contributing Member, and Outstanding Alumna/Alumnus.

In 2014, two members were inducted into the Science Atlantic Hall of Fame, Dr. Zoë Hayes, retired psychology professor from St. Francis Xavier University, and Dr. Merzik Kamel, retired Mathematics professor from University of New Brunswick, Saint John.




**Dr. Merzik Kamel**  
Outstanding Contributing Member



**Dr. Zoë L. Hayes**  
Outstanding Contributing Member

We are pleased to recognize Dr. Zoë L. Hayes and Dr. Merzik Kamel for their many years of dedicated service to Science Atlantic and the scientific community.



“I am thrilled to learn that the Selection Committee for the Science Atlantic Hall of Fame has selected me to be inducted as an ‘Outstanding Contributing Member.’ It was a great pleasure to serve Science Atlantic in my capacity as a Chair, a Vice Chair, and a committee member.”

– Dr. Merzik Kamel, University of New Brunswick, Saint John

## Speaker Tours

Several committees partner with other organizations to host speaker tours of notable scientists. Each speaker visits a minimum of three different post-secondary institutions in Atlantic Canada, and lectures are free and open to all interested. The 2014-15 speaker tours featured talks on:

### **Chemistry (co-sponsored with the Chemical Institute of Canada):**

- *Exploring the Use of Indium(III) Dithiolates as Green Lewis Acid Catalysts*, Glen Briand (MtA)
- *Multiscale Computational Chemistry*, Christopher Rowley (MUN)

### **Geology (co-sponsored with the Atlantic Geoscience Society):**

- *Uncluttering and reactivating and the western Laurentian basement: lessons from the margins of the Thor-Odin dome in southeastern British Columbia*, Deanne Van Rooyen (CBU)
- *Talk 1: Hydrothermal alteration: the role and record of coupled dissolution-precipitation, Talk 2: From grain scale to mountain scale: timing and timescales of evolving orogenic processes*, Chris McFarlane (UNB)

### **Physics and Astronomy (co-sponsored with the Canadian Association of Physicists):**

- *Quantum Physics in Your Light Bulb: A Colourful Story*, Kristin Poduska (MUN)
- *In Search of New Quantum Fluids of Light and Matter*, Carlos Silva (U de Montréal)
- *Tightly Squeezing Light in Small Spaces*, Pablo Bianucci (Concordia)



# Student Contributions

From student conference attendees to co-op student employees, students have always been our central focus and their contributions are significant to the success of Science Atlantic. Each year, student volunteers generously dedicate their time to organizing our conferences, and our student employees take on important projects while also gaining valuable skills and experience.

In the 2014-15 year, five students worked for Science Atlantic. In the summer, James Curtis and Jasmine Golf, both from Dalhousie, completed their second work terms with us, providing marketing and conference support. We also hired a second year Dalhousie student, Emily Cross, who worked on Conference-in-a-Box (CIAB). In the fall, Prasad Rajandran (Acadia) returned to continue working on the Atlantic Facilities and Research Equipment Database (AFRED) and we hired a Public Relations co-op student from Mount Saint Vincent University, Robyn Craig.



**Robyn Craig**  
Marketing and  
Communications  
Assistant



**Emily Cross**  
Conference-in-a-  
Box Coordinator



**James Curtis**  
OCS Administrator



**Jasmine Golf**  
Marketing  
Coordinator



**Prasad Rajandran**  
Software Developer

# Conference-in-a-Box

This year we completely rebuilt Conference-in-a-Box (CIAB), our collection of planning resources and website tools for conference organizers.

Based on the recommendations of a Dalhousie Information Management student team, Emily Cross (Computer Science) created an updated and easy to use conference planning guide with conference-specific timelines. The new CIAB will provide faculty and student organizers of Science Atlantic's annual conferences with the necessary resources to successfully plan a conference. CIAB offers detailed timelines and roles for each member of the conference planning team and now also includes subtopics and timelines that are unique to each conference.

James Curtis, an Informatics student, spent the summer improving our online abstract submission process and continuing to customize the software we use for conference website design and registration.

We look forward to making further conference-specific customizations to CIAB in the years to come.



Judging Food Fundraising  
Accommodations Public Relations  
Posters Webmaster Awards  
Treasurer Chair Grad Fair  
Keynote Speakers Venue  
Registration Field Trips Trade Show



# Financial Highlights



- Universities & Member Institutions
- Investments
- Donors, Sponsors and Grants

- Speaker Tours
- Student Awards
- AFRED
- Conference Support
- Member Support
- Fundraising
- Finance and Administration



Detailed financials can be found at [www.sciatl.org/2015Financials](http://www.sciatl.org/2015Financials).



“Canadian Science Publishing is proud to support Science Atlantic’s efforts to recognize excellence in science communication. Through their student conference series, Science Atlantic provides a much-needed platform for students to communicate their research. We greatly value our collaboration and we are thrilled to help the next generation of researchers gain experience in sharing their science with the world.”

– Dr. Michael Donaldson, Canadian Science Publishing

## Why Contribute?

Science Atlantic is a charitable association advancing science education and research at the post-secondary level. With a very modest annual operating budget, we are able to deliver programs and facilitate connections that have a positive impact on students, educators, and researchers in the Atlantic region.

Our conferences give students their first professional presentation opportunities and can launch their research careers. For researchers and educators, our network facilitates connections that can lead to graduate student recruitment, research collaborations, and scientific and teaching discussions. For universities, our united effort strengthens their impact on science issues in the region.

We rely on both individual donors and corporate sponsors to help fund our activities. Your contributions help to:

- Fund student conferences in nine disciplines and provide travel assistance for students to attend these conferences
- Sponsor student awards recognizing excellence in research and science communication
- Fund regional lecture tours by notable scientists
- Support special projects that address regional science issues

You can donate at [www.sciatl.org/plsDonate](http://www.sciatl.org/plsDonate).

Thank you for your generosity!

# Thank you, Sponsors!

Aquaculture Association of Canada  
Atlantic Association for Research in the Mathematical Sciences  
Atlantic Elver Fisheries  
Atlantic Geoscience Society  
Canadian Botanical Association  
Canadian Centre for Fisheries Innovation  
Canadian Mathematical Society Student Committee  
Canadian Nuclear Safety Commission  
Canadian Science Publishing  
Canadian Society of Exploration Geophysicists  
Canadian Society of Petroleum Geologists  
Chemical Institute of Canada  
Chemical Institute of Canada, Chemical Education Trust Fund  
Chemical Institute of Canada, Maritime Division  
ClearWater  
Cooke Aquaculture  
Elanco Animal Health  
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Enterprise Saint John  
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NB Power  
Nelson Education Ltd.  
Newfoundland Aquaculture Industry Association  
Nova Scotia Department of Economic Development  
Novartis Animal Health Canada  
NSERC Atlantic Regional Office  
Pearson Education  
Planet Hatch  
Skretting North America  
Springboard Atlantic  
Statistical Society of Canada  
T4G  
Trevali Mining Corporation  
Valox  
Wolfden Resources



# Looking Ahead

## Atlantic Facilities and Research Equipment Database (AFRED)

Thanks to the support of Springboard, NSERC Atlantic, BioNB, and others, 2014-15 saw the successful testing and analysis of the Atlantic Facilities and Research Equipment Database prototype.

Computer Science student Prasad Rajandran worked on improving the AFRED database for version 2.0, making changes based on feedback received from researchers and stakeholders. He also implemented technical improvements that will ensure that scalability and performance goals are met.

Once completed, AFRED will be an open access, online, searchable database designed to increase the use of specialized research infrastructure in our region by connecting potential users with the facilities that host the equipment.

We are now poised to move forward on a larger scale, including completing the technical aspects of the redesigned system, recruiting a broader range of facilities and equipment, and promoting the service to business and industry as well as post-secondary researchers.



[www.scienceatlantic.ca](http://www.scienceatlantic.ca)

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