



AQUACULTURE
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DU CANADA

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Watermark

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Aquaculture Canada 2014

This was an exciting year for AAC as it marked our 30th Anniversary! AC 2014 was a culmination of reminiscing, looking to the future, celebrating our successes, and recognizing the challenges that lie ahead. Thank you to everyone that attended and participated in the conference this year. A special thank you to our founding members for bringing their vision of the Association to life. Here's to another 30 years ahead!

We want to acknowledge the numerous contributions that the Association and its members have had on the development of the aquaculture industry in Canada. We would particularly like to thank our members and sponsors for their support toward AC 2014.



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Aquaculture Canada 2015

The Aquaculture Association of Canada will be holding its conference and annual general meeting at the Vancouver Island Conference Centre in Nanaimo, BC on May 31st to June 3rd, 2015

Stay tuned for dates on abstract submission, program information, sponsorship, accommodations, activities and more! Don't miss AC 2015!





AAC 2014 Award Winners

As AC 2014 was a special conference marking our 30th anniversary, we presented two **Lifetime Achievement Awards** to two exceptional members, Mr. Cyr Couturier and Dr. Santosh Lall. The Lifetime Achievement Award recognizes an individual who best exemplifies the aims and objectives of the Association. Congratulations Mr. Couturier and Dr. Lall!

The prestigious **Research of Excellence Award** was presented to Dr. Fred Page. The Award recognizes individuals for their outstanding research contribution in the area of aquaculture in Canada. Congratulations Dr. Page!



Photo: Dr. Fred Page (left) and Mr. Cyr Couturier (right) after accepting the Research of Excellence and Lifetime Achievement Award.

Call for Nominations

The call for nominations is open for the **Research Award of Excellence (RAE)**. For details on award guidelines and nomination letters:
<http://www.aquacultureassociation.ca/awards/research-award-of-excellence/>

Deadline for nominations: March 31st, 2015

Send to: awards@aquacultureassociation.ca

AAC 2014 Student Awards

Best Presentations

Paul van Dam-Bates- U. of Victoria (Oral)

Jamie Lim- Simon Fraser U. (Poster)

Scholarship Awards

Allie Byrne- U. of Victoria

Robert Bourdon- U. Victoria/Vancouver Island U.)

Chris Small (U. of New Brunswick)

Congratulations Paul, Jamie, Allie, Robert, and Chris!

Student Award Deadlines

Applications for Student Scholarships and Travel Awards for AC 2015 in Nanaimo will be due in March 31st, 2015. More to come!

Like us on Facebook!

Add us “Aquaculture Canada Student-Affairs” for updates on student activities, conference information, discussions, and more!





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AAC STUDENT BBQ CARNIVAL



The "Carnival" was a success! We had carnival games, prizes, popcorn, and a fortune teller! Thanks to everyone for participating, especially the Team Pie Eating Contest!





2014 Lifetime Achievement Awards & Research of Excellence Award



Mr. Cyr Couturier became interested in applying his education to help solve some of the emerging issues facing the world in terms of food security; capture fisheries were under increasing human and environmental pressure and aquaculture seemed like a good option to focus upon. Cyr completed his graduate studies in Marine Biology from Dalhousie University in 1986. He has 35 years of experience in applied research, project development, teaching, and extension services in the aquaculture and fisheries sectors. He is currently Chair of aquaculture programs at Memorial University, with programs ranging from junior high to on-farm extension courses to post-graduate professional and research degrees. His areas of research span a range of topics, including enhanced farm production, environmental management and aquaculture interactions. He has worked in 18 countries around the world in development,

trade missions, and extension and technology transfer / science exchange programs. All of the projects in those countries focus on aquaculture, food security, and sustainable development. Recent efforts in sub-Saharan Africa and South East Asia focus on strategies for adapting fish farming to climate change. Cyr has mentored about 200 graduate diploma students in aquaculture, over 200 junior and high school students in aquaculture programs and hundreds of fish and shellfish farmers around the globe. Cyr participates fully in a range of academic, industry and professional organizations devoted to sustainable aquaculture and community development. He has been a Director with the NAIA since 1996, an Executive Director for three terms, and is currently a second term President. He was a Board member of the AAC for nearly two decades (from 1990 to 2010) including three terms as President. Cyr is looking forward to the second half of his career in sustainable aquaculture, and is grateful for the support, collaboration, friendship and patience of his colleagues, students, industry partners, and acquaintances on this journey called sustainable aquaculture.



Dr. Santosh Lall is an outstanding scientist, mentor and leader in the field of nutrition. Dr. Lall completed his BSc in Agriculture in 1965 from Allahabad University in India. He completed an MSc in Animal Science in 1969 and a PhD in Nutrition in 1973 from the University of Guelph and has remained in Canada ever since. In 1974, he accepted a position in Halifax as a Research Scientist with DFOs Aquaculture Division and remained there until 1994. From 1994 to 1996 he was the Head of the Fish Health and Nutrition section at DFO and then became a Senior Research Officer and ultimately Principal Research Officer at the NRC Institute for Biosciences. Santosh retired in 2013 but remains an Adjunct Professor or Honorary Research Associate in five different Atlantic Canadian University departments. Dr. Lall is a pioneer in the aquaculture industry and has contributed significantly to the science leading to the formulation of effective, efficient diets of marine

invertebrates and vertebrates for the aquaculture industry. He has dedicated his career to the understanding of the nutritional requirements of marine species and the adoption of new, innovative feed ingredients to boost the development of the industry. Santosh has played a central role in the development and maturation of public and private aquaculture since the 1970s. Not only does Santosh continue to be a source of inspiration and guidance to



industry in the field of nutrition. He has provided this same guidance and inspiration to many university students and industry personnel throughout his career and continues to shape the next generation of researchers. Santosh is known for his dedication to students and their individual success. Dr. Lall's work is not only recognized within Canada but also internationally. He has been involved with the publication of NRC's Nutrient Requirements of Fish and has long participated in the International Symposium of Fish Nutrition and Feeding. He has contributed to Halver's first edition of the Fish Nutrition text book in 1979 and has contributed to every edition since. Over his 40 year career, he has co-authored 7 book chapters and over 100 peer-reviewed journal publications. Santosh Lall has been awarded the Lifetime Achievement Award from the Aquaculture Association of Canada for both his dedication to the science of aquaculture nutrition research as well as the lifetime of support and inspiration he has provided for those who work in the industry.



Dr. Fred Page received a Bachelor of Science (Hons) in Marine Biology from the University of New Brunswick in Saint John, a Masters of Science in Biology from the University of New Brunswick and a Doctor of Philosophy in Oceanography from Dalhousie University. Dr. Page's initial foray into aquaculture research included some limited experimentation with the outgrowing of Bay Scallops and the development of software for tracking and predicting feed utilization and growth of trout reared in a land based system. As a Fisheries and Oceans Canada research scientist he has worked closely with industry representatives, government policy makers and regulators as well as university colleagues and has developed and led a research team whose aquaculture research has focused on relating physical and chemical aspects of the marine environment to applied aspects of aquaculture production and regulation. His work has emphasized the acquisition of in situ measurements of temperatures, salinities and dissolved oxygen, sediment sulphide, water currents, waves, the transport and dilution of suspended substances and the development of numerical analyses and predictive models. He has conducted research activity related to applied issues such as the carrying capacity of mussel and finfish culture, oxygen depletion by salmon farms, spread of ISA and the development of aquaculture bay management areas, transport and deposition of organics released from finfish farms, spatial and temporal variation in sediment sulphide, design of aquaculture environmental impact monitoring programs, and the transport and dispersal of sea lice therapeutants released from net pens and well boats. He has been the Director of the DFO's Center of Expertise on Integrated Aquaculture Science, an official member of Canadian aquaculture science delegations to Spain and Chile, a member of a Canadian delegation to a Pacific Rim aquaculture conference, a contributor to several DFO advisory documents relating to aquaculture, a member of various aquaculture regulatory support committees, an adjunct professor at several universities, a recipient of distinction awards for contributions to sea lice integrated pest management research and team work, partnership and cooperation, a member of the United Nations team on the status of the world's oceans, and an invited scientific reviewer of the New Zealand NIWA aquaculture environmental interactions program. In the future Dr. Page hopes to continue researching along these lines with an emphasis on developing better predictive models and decision support tools of use to aquaculture regulation and development.



Student Award Winner Profile

Paul Van-Dam Bates
(Best Oral Presentation 2014)

AAC: *Where and what you are studying?*

PVDB: I recently finished a Master's degree in Statistics at the University of Victoria (UVic).

AAC: *What is your thesis about?*

PVDB: My program was a mix of course work and research. I focused my statistical efforts researching mark-recapture and mixed-effects modelling. It is unusual for Statistics graduate students to collect their own data, but I was fortunate enough to also run experiments on sea cucumber movement and containment at the Pacific Biological Station (PBS) in Nanaimo, BC. The project was funded through Fisheries and Ocean Canada's Aquaculture Collaborative Research and Development Program (ACRDP).

AAC: *Who is your supervisor?*

PVDB: Dr. Laura Cowen (Dept. of Mathematics and Statistics) was my internal supervisor at UVic, Dr. Chris Pearce (Fisheries and Oceans Canada) was my external supervisor at PBS, and Dr. Steve Cross (Dept. of Geography, UVic) was on my supervisory committee. Dr. Daniel Curtis is worth mentioning here as well – he was a post-doc working on the ACRDP project and provided a great deal of mentorship and guidance.

AAC: *What is your background?*

PVDB: I have a Bachelor of Science degree (a double major in Statistics and Economics) from UVic. Outside of school, my first job at 16 was with a small mussel farm in Shelton, WA. During most of my undergraduate summers I worked on a dock on West Thurlow Island, BC and drove a water taxi in that area. I have also worked with Human Resources Skills Development Canada (HRSDC) as a labour market analyst.



AAC: *How did you get interested in what you are studying?*

PVDB: I've always loved the outdoors, especially being on the ocean, but at the same time I really enjoy math. Before starting a Master's in Statistics I wanted to make sure I could pair it with hands-on research to give me the necessary experience to get me away from the computer. Contacting people at UVic who were doing interesting research allowed me to make connections with Dr. Steve Cross and Dr. Chris Pearce who started me on sea cucumber research.

AAC: *What if any challenges do you face in your studies?*

PVDB: My lack of biology/ecology knowledge going into this project.

AAC: *What do you see yourself doing after you graduate?*

PVDB: I see myself continuing my quest of finding ways to mix statistics with field work. What has been great about the ACRDP project is that it introduced me to the aquaculture industry, which seems to be a great place to try and do this.



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