George Geldart, PAg Chair, Nominations Committee, BCIA

RE: Nomination for election for Registrant Board Member for Regional Electoral District 3.

Dear George,

Please accept this letter and the attached documents in application for the above noted BCIA Board vacancy.

As an aquaculture professional for over 30 years and a Professional Agrologist for 13 years, I have held numerous senior leadership positions in the private and public sectors, at the provincial, national and international level. This work is supported by active participation on numerous boards and committees. Volunteer work includes serving as the president of the BCIA Victoria and Island's Branch, as member of the Nominations Committee, mentoring Articling Agrologists and leading several professional development field trips/seminars. I have also served on the Board of Directors for the Aquaculture Association of Canada, as Chair of the Salmon Health Consortium Board of Directors, and participated on numerous technical advisory committees.

This background has given me extensive experience in vision and goal setting, problem-solving, relationship-building, policy governance, and organizational leadership which I believe would add value to the BCIA Board.

For my part, and relative to my areas of practice, I believe Agrologists have a role to play in BC's aquaculture sector to ensure that the production of aquatic species is safe, ethical, and sustainable. This is critical for protecting the public interest. In fact, when I was articling in 2012-2013, I noted in my Articling Review Paper that I thought the profession of agrology could play a larger role in the aquaculture sector. Looking back, my work has benefitted by becoming a Professional Agrologist. I also work in the field of climate change. This is another field in which science-based, qualified and accountable professionals such as engineers, agrologists and planners will play increasing roles to protect the public interest now and the years to come. I was therefore very supportive of the recent changes to BC's *Professional Governance Act* and *Agrologists Regulation*. However, in my experience, industry, the Public Service Agency and the Professional Employees Association have not kept pace with recent developments with respect to registration requirements, include new registration designations for individuals working in fields of aquaculture climate change. Without a doubt adopting these changes on the ground is complex and will take time. I would like to do my part to change this - and why I would like to serve on the BCIA Board so I can contribute to resolving these and other issues facing the profession of Agrology.

I would like to conclude by affirming that I am unaware of any conflict of interest that would prevent me from fulfilling the duties of a member of the BCIA Board.

Thank you for your time and consideration of my application.

Myron Roth, PhD, PAg

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Myron Roth, PhD, PAg



Career Profile

Biologist with over 30 years progressive experience in seafood, production systems, biotechnology, research and innovation, veterinary drugs, vaccines and pesticides, climate change, regulatory affairs and intergovernmental relations, quality systems, business development and planning. Strengths include strategic planning, problem solving and program development, fund raising, technology transfer, team building and motivation, project management and communications.

Employment History

Director, Climate Risk Management (September 2023 – Present)
 Climate Action Secretariat, BC Ministry of Energy and Climate Solutions

Lead development and implementation of provincial strategies and policies on climate adaptation to increase provincial capacity to adapt to climate change and reduce climate change risks. Collaborate with partner ministries and external agencies and provide strong leadership to promote widespread adoption of practices that incorporate assessment and management of climate change risks and resilience in planning and decision-making. Develop policies and mechanisms for the transfer of knowledge between institutions, researchers and decision-makers while working at the provincial, national and international levels to foster knowledge exchange, develop projects and guidelines. Key BC files supported include: Climate Preparedness & Adaptation Strategy, Climate Change Accountability Report, Provincial Disaster & Climate Risk & Resilience Assessment, Disaster & Climate Risk Reduction Plan, and Adaptation Monitoring and Evaluation Framework.

2. Team Lead, Aquaculture & Marine Fisheries (April 2019 – January 2022/April 2022 - Present) Extension and Support Services Branch, BC Ministry of Agriculture & Food

Provide leadership and coordination for a team of professional and technical staff for the delivery of the Ministry's sector development program for seafood production from aquaculture and commercial marine fisheries. Responsible for short and long-term planning, financial supports, stakeholder relationships and engagement, and overseeing program delivery. The position works closely with industry personnel and their representative bodies, other Ministry branches, other government departments, and all levels of regional and local government, including First Nations with the view to developing strong collaborative relationships. Responsible for coordinating Ministry led and collaborative inter-agency funding programs, budgets, and resource programs for: research & development, innovation, clean technology, capacity building, business risk management, scientific reviews, risk assessments, nuisance complaints, climate change/ocean acidification for the aquaculture and fisheries sectors. Co-Chair for the development and drafting of the BC Ocean Acidification and Hypoxia Action Plan. Extensive technical work on alternative technologies for salmon aquaculture, including recirculating aquaculture system.

3. A/Executive Director (January 2022 – March 2022)
Fisheries, Aquaculture & Wild Salmon Branch, BC Ministry of Agriculture, Food & Fisheries

Two-month temporary appointment to provide strategic leadership and advice to executive and elected officials for government's fisheries and wild salmon priorities. Collaborate with other ministries, federal and local governments, industry, and Indigenous Nations to develop new strategies to protect and revitalize BC's wild salmon populations, promote innovation, enhance fish habitat protection and promote domestic processing for fish caught in BC. Lead the response to high-profile controversial issues related for BC's fisheries files (salmon, aquaculture, commercial fisheries). Oversee the policy and operations units and manage the financial resources of the branch. Provided staff support and strategic direction during the NRS reorganisation.

4. Industry Specialist – Aquaculture and Seafood (October 2011 – April 2019)
Sector Development Division, Industry Development Services, BC Ministry of Agriculture

Collect industry data/intelligence by building and developing long-term relationships with industry stakeholders and other government agencies. Provide technical expertise, and extension and advisory services to BC's aquaculture industry. Identify research needs and business opportunities for the sector and developing innovative solutions to enhance the competitiveness of the aquaculture and seafood sectors. Industry outreach though conference and workshop development, organisation and delivery, development of best practices/codes. Program lead for BC Fish and Seafood legislative review and consultation. Developed/designed the BC Oyster Recovery Program, lead on implementation. Knowledgeable Person for British Columbia Farm Industry Review Board complaint (noise/shellfish aquaculture).

5. Aquaculture Analyst (August 2007 – October 2011)
Policy, Industry & Competitiveness Branch, BC Ministry of Agriculture

Responsible for writing and reviewing technical papers on aquaculture legislation, policy, and practices, including the BC Fish & Seafood Act, BC Animal Disease Control Act, BC Veterinarians Act, Federal Pacific Aquaculture Regulation, Aquaculture Activities Regulation. Project lead for the Sea Lice 2020 Conference.

6. Consultant (2005-2007) Aquaculture Online, Victoria, British Columbia

Market assessments for aquaculture drugs, vaccines, and pesticides used in Canada and abroad; dossier submission support services for veterinary vaccine, drug, pesticides applications; fish health research. Provided expert advice on aquatic animal drug and vaccine licensing/registration; global aquaculture pharmaceutical markets, opportunities, and constraints; regulatory due diligence for acquisitions. Clients included: Pfizer Animal Health, West Coast Koi, Novartis Animal Health, Schering Plough Animal Health, Pest Management Regulatory Agency, Health Canada, Canadian Aquaculture Industry Alliance.

7. Head of Regulatory Affairs, Americas – Aquahealth Business Unit (1999 – 2005)

Novartis Animal Health, Charlottetown, Prince Edward Island_
Responsible for the regulatory portfolio, inspection and compliance activities for testing and manufacturing facilities. Management and business development planning as part of the senior

management team. Successfully managed a veterinary vaccine regulatory portfolio that included over 65 marketing authorizations in 12 countries (Canada, USA, Norway, Faeroe Islands, Finland, Sweden, Ireland, France, Ireland, Turkey, Chile, & Peru). Successfully restructured Quality Assurance/Control program to improve manufacturing compliance and maintain establishment licenses for one existing and the commissioning of two new vaccine manufacturing and testing facilities. Direct and indirect supervision of staff in Canada (located in multiple provinces) and Chile within a matrix management framework. Successfully commissioned a new DNA vaccine manufacturing facility in Canada (Montreal).

8. A/Executive Director (1998 – 1999)/Technical Director (1997 – 1998) Salmon Health Consortium, Ottawa, Ontario

Responsible for day-to-day administration, budgets and operations of the Salmon Health Consortium, a not-for-profit organization with a mandate to address the lack of licensed fish health products for the Canadian aquaculture industry. Successfully led the design and implementation of a therapeutant-use certification best practices program for salmon and trout farming in Canada, "Healthy Salmon". Wrote market assessments for SLICE® (global); and povidone iodine (Canada).

9. Technical Director (1993 – 1997)
Pacific National Group Ltd., Victoria, British Columbia (now Cermaq Canada, Campbell River)

Responsible for developing and managing the biotechnical support program for both freshwater and sea water operations of a vertically integrated salmon farming company (chinook and Atlantic salmon). Developed and managed biotechnical/fish-fish health staff and budgets. Key initiatives included the development of a comprehensive fish health program that focused on best management practices, diagnostics, and a comprehensive vaccination program; design and management of a selective breeding programs for chinook and Atlantic salmon, growth modelling and planning programs, environmental monitoring programs, research/technology transfer projects.

Education

Ph.D. (University of Stirling, Scotland) (1993), Fish Chemotherapy (Sea Lice) B.Sc. (University of British Columbia) (1987), Zoology

Professional Memberships

P.Ag. BC Institute of Agrologists (2013)

Publications & Public Speaking

Extensive publication and public speaking record, which includes over 50 publications in peer-reviewed research journals and editorial assignments (17), contract reports (16), and popular articles in trade magazines (27). I have given numerous presentations at national, international research conferences, symposia, and workshops, including an invited Keynote address. Conceived and developed the "Aquaculture in the Classroom" project in collaboration with the BC Agriculture in the Classroom Foundation and the Aquaculture Association of Canada. Publication and Speaking List available on request.

Board & Committee Appointments

- 1. British Columbia Institute of Agrologists, Victoria and Islands Branch: President Elect (2018), President (2019), Past President (2020), Nominations Committee: 2020 Present
- 2. Vancouver Island University Center for Seafood Innovation Industry Advisory Committee 07/2021 06/2023
- 3. Genome BC Fisheries and Aquaculture Sector Advisory Council: 02/2019 06/2022
- BC Ocean Acidification & Hypoxia Action Plan Advisory Committee (Co-Chair) 08/2021 04/2023
- 5. DFO Freshwater Land-based Aquaculture Industry Advisory Committee 10/2012 08/2023
- 6. DFO Shellfish Aquaculture Industry Advisory Panel 10/2012 08/2023
- 7. DFO Shellfish Aquaculture Management Advisory Committee 10/2012 08/2023
- 8. DFO Finfish Aquaculture Industry Advisory Committee 10/2012 08/2023
- 9. DFO Aquaculture Collaborative Research and Development Committee, Technical Advisory Committee/National Steering Committee 01/2012 08/2023
- 10. Broughton Aquaculture Transition Initiative Broughton Finfish Aquaculture Technical Working Group Innovation Task Group 01/2021 06/2022
- 11. National Farm Animal Care Council, Code Development Committee, Farmed Finfish (Farmed Salmon Welfare Code) 5/2019 10/2021
- 12. DFO Indigenous Multi-Stakeholder Advisory Body & the Salmonid Alternative Production Technology Working Group 06/2019 01/2021
- 13. DFO Canadian Science Advisory Secretariat Assessment of the risk to Fraser River Sockeye due to pathogen transfer from Marine Atlantic salmon farms located in the Discovery Islands in British Columbia (Steering Committee & Technical Advisory Committees) 06/2016 10/2020
- 14. State of Salmon Aquaculture Technologies Study (Fisheries and Oceans Canada) Project Management Committee 12/2018 12/2019
- 15. Aquaculture Association of Canada, Board of Directors 06/2013 06/2015
- 16. Tides Canada Salmon Aquaculture Innovation Fund Technical Advisory Committee 01/2011-08/2014
- 17. Canadian Animal Health Institute, Veterinary Biologics Committee: 12/1999 12/2005
- 18. Salmon Health Consortium, Board of Directors (President & Chair): 10/1999 to 03/2003
- 19. Health Canada "Advisory Committee on Animal Uses of Antimicrobials and their Impact on Resistance and Human Health", Committee Member: 12/1999 06/2002

Continuing Education (selected)

- 1. Foundations of Aboriginal Law (BC Attorney General's Indigenous Legal Relations Team, 2023)
- 2. Indigenous Awareness Certification (Course 201) (Indigenous Awareness Canada, 2022)
- 3. Joint Leadership Cohort, People and Workplace Strategies Branch, Corporate Services for the Natural Resource Ministries (BC Public Service Agency, 2019)
- 4. Occupational Safety & Health Committee Course (BC Public Service Agency, 2010)
- 5. Working Effectively with Aboriginal People (Indigenous Corporate Training Inc., 2008)
- 6. Laboratory Biosafety Training (Biohazard Management Services, 2004)
- 7. Patent Protection in Biotechnology: Issues & Strategies for Effective Protection (Biotechnology Human Resource Council/Borden, Ladner, Gervais, 2003)
- 8. Establishing Supplier Audit & Vendor Qualification Program (International Pharmaceutical Academy, 2003)
- 9. Good Manufacturing Practices & Good Laboratory Practices (The Center for Professional Advancement, 2003)
- 10. Leading at the Frontline: Novartis Senior Executive Management Training Program (CDR International in association with Harvard Business School, 2003)