2026-001-00578

The Honourable Joanne Thompson
Minister of Fisheries, Oceans and the Canadian Coast Guard
House of Commons
Ottawa, Ontario
Canada K1A0A6

Academic scientists support of continued investment in DFO's Molecular Genetics Laboratory

Dear Minister,

Wild salmon are an integral part of the cultures, economies, and ecosystems across Canada. Prior to industrialization, salmon did not require molecular health surveillance. Today, however, salmon populations face increasing cumulative anthropogenic stressors, and are in decline across much of their range. Molecular tools have become integral to monitor and manage risks and protect salmon populations.

Decades of support and investment by non-governmental organizations, granting agencies, First Nations, and the federal government have led to the development of a cutting-edge comprehensive suite of molecular tools to monitor environmental and human mediated risks to salmon. Much of this work has been undertaken in close collaboration with the academic sector, where we have worked side-by-side with government scientists to better understand and protect salmon health. This multi-decadal research and development effort has given us the capacity to comprehensively assess the health challenges facing salmon, and these data have resulted in management decisions with tangible benefits to salmon populations across Canada.

We are writing to express our strong support for continued investment in DFO's Molecular Genetics Laboratory (MGL) at the Pacific Biological Station, Nanaimo, pioneered by Dr. Kristi Miller, amidst rumours and signs that the program may face large cutbacks and workforce adjustment in the implementation of budget 2025. For example, the head of the Genomics Program position is currently scheduled to end March 31st. We highlight that while this program relies on staffing and overhead costs covered by federal budgets, it functions as a multiplier—successfully attracting external investment and international collaboration and establishing itself as a global leader in the application of molecular tools to monitor fish health and to inform sustainable resource management in Canada. Implementation of these tools requires a dedicated program lead, whose primary focus is applying tools to monitor the health of wild salmon.

Working alongside government scientists in the genomics program, collaborative research has:

- Developed a molecular method to monitor how salmon react to different stressors, showing, for example, when and where they experience heat stress linked to climate change.

- Created tools to discover and monitor pathogens to understand disease risks from hatcheries and aquaculture. This widespread monitoring has revealed which infections affect wild salmon survival and population health.
- Used eDNA (environmental DNA) to monitor ecosystem health, salmon stocks, and aquaculture operations as well as to curtail illegal fisheries.

Collectively, these initiatives have resulted in many dozens of peer-reviewed scientific papers and contributed directly to risk assessments, stock-rebuilding strategies, and the provision of scientific advice to decision-makers. This work has informed briefings to the Minister's Office, the Prime Minister's Office and Privy Council, the Cohen Commission of Inquiry, the Standing Committee on Fisheries and Oceans (FOPO), and numerous expert panels and strategic working groups.

Sustained, long-term molecular monitoring is essential for the long-term management of salmon populations. Interruptions to these programs weaken Canada's capacity to detect emerging threats, evaluate management actions, and uphold science-based decision-making, ultimately increasing risks for critically important (and imperilled) salmon stocks throughout Canada.

At a time when Canada is seeking stability amid economic and political pressures, protecting and recovering salmon populations should be a cornerstone of the country's future resilience. Continued investment in healthy salmon populations is critical to safeguarding local economies, advancing reconciliation commitments, maintaining public trust in fisheries management, and ensuring resilient ecosystems for future generations. We strongly urge for continued support for DFO's MGL Genomics Program, to continue supporting evidence-based management for salmon, now and into the future.

Signed,

Dr. Gideon Mordecai, Research Associate, University of British Columbia

Dr. Scott Hinch, FRSC, Distinguished Scholar, Professor and Associate Dean, University of British Columbia

Dr. Robert Lennox, Scientific Director, Ocean Tracking Network (Ocean Tracking Network), Associate Professor, Dalhousie University

Dr. Sarah (Sally) Otto, FRSC, FRS, Killam University Professor & Director, Liber Ero Post-doctoral Program

Dr. Michael Russello, Professor, University of British Columbia

Prof. Sean Godwin, Assistant Professor, University of California Davis and Adjunct Professor, Simon Fraser University

Dr. Will Bugg, University of British Columbia

Dr. Chris Darimont, Professor & Raincoast Chair of Applied Conservation Science, University of Victoria

Dr. Kristen Gorman, Assistant Professor, College of Fisheries and Ocean Sciences, University of Alaska Fairbanks

Dr. Øystein Wessel, Research scientist, Norwegian University of Life Sciences

Prof. Rick Routledge, Professor Emeritus, Simon Fraser University

Dr. Michael Price, Adjunct Professor, Simon Fraser University

Dr. Madison Earhart, University of British Columbia

Dr. Matthew Thorstensen, University of Toronto

Mack Bartlett, University of Victoria

Dr. Lawrence M Dill, FRSC, Professor Emeritus, Simon Fraser University

Kaytlyn Tasalloti, University of British Columbia

Dr. Dylan Shea, Senior Researcher, Norwegian Research Centre

Dr. Jan Grimsrud Davidsen, Research Professor, NTNU University museum

Dr. Ken Jeffries, Associate Professor, University of Manitoba

Prof. Jaime Grimm, Assistant Professor & Indigenous Science Scholar, University of Victoria

Dr. Emma Atkinson, University of Alberta

From: Gideon Mordecai <gidmord@gmail.com>
Sent: Wednesday, February 4, 2026 5:24 PM
To: Thompson, Joanne - M.P.
Cc: Classen, Anna (DFO/MPO); Thomson, Andrew (DFO/MPO); Weiler, Patrick - M.P.; Arnold, Mel - M.P.; Deschênes, Alexis - Député; Connors, Paul - M.P.; Cormier, Serge - Député; Dawson, Mike - M.P.; Gunn, Aaron - M.P.; Klassen, Ernie - M.P.; Morrissey, Robert - M.P.; Small, Clifford - M.P.; Arsenault, Elizabeth (DFO/MPO); McKinnon, Ron - M.P.; Wilkinson, Jonathan - Personal; Bunbury, Cynthia (Wilkinson, Jonathan - MP); Johns, Gord - M.P.; Lindner, Joshua (DFO/MPO); Beech, Terry - M.P.; May, Elizabeth - M.P.; Davies, Don - M.P.; Kwan, Jenny - M.P.
Subject: Academic scientists support of continued investment in DFO's Molecular Genetics Laboratory
Attachments: Academic letter of support for DFO science.pdf

The Honourable Joanne Thompson
Minister of Fisheries, Oceans and the Canadian Coast Guard
House of Commons
Ottawa, Ontario
Canada K1A0A6

Academic scientists support of continued investment in DFO's Molecular Genetics Laboratory

Dear Minister,

Wild salmon are an integral part of the cultures, economies, and ecosystems across Canada. Prior to industrialization, salmon did not require molecular health surveillance. Today, however, salmon populations face increasing cumulative anthropogenic stressors, and are in decline across much of their range. Molecular tools have become integral to monitor and manage risks and protect salmon populations.

Decades of support and investment by non-governmental organizations, granting agencies, First Nations, and the federal government have led to the development of a cutting-edge comprehensive suite of molecular tools to monitor environmental and human mediated risks to salmon. Much of this work has been undertaken in close collaboration with the academic sector, where we have worked side-by-side with government scientists to better understand and protect salmon health. This multi-decadal research and development effort has given us the capacity to comprehensively assess the health challenges facing salmon, and these data have resulted in management decisions with tangible benefits to salmon populations across Canada.

We are writing to express our strong support for continued investment in DFO's Molecular Genetics Laboratory (MGL) at the Pacific Biological Station, Nanaimo, pioneered by Dr. Kristi Miller, amidst rumours and signs that the program may face large cutbacks and workforce adjustment in the implementation of budget 2025. For example, the head of the Genomics Program position is currently scheduled to end March 31st. We highlight that while this program relies on staffing and overhead costs covered by federal budgets, it functions as a multiplier—successfully attracting external investment and international collaboration and establishing itself as a global leader in the application of molecular tools to monitor fish health and to inform sustainable resource management in Canada.

Implementation of these tools requires a dedicated program lead, whose primary focus is applying tools to monitor the health of wild salmon.

Working alongside government scientists in the genomics program, collaborative research has:

- Developed a molecular method to monitor how salmon react to different stressors, showing, for example, when and where they experience heat stress linked to climate change.
- Created tools to discover and monitor pathogens to understand disease risks from hatcheries and aquaculture. This widespread monitoring has revealed which infections affect wild salmon survival and population health.
- Used eDNA (environmental DNA) to monitor ecosystem health, salmon stocks, and aquaculture operations as well as to curtail illegal fisheries.

Collectively, these initiatives have resulted in many dozens of peer-reviewed scientific papers and contributed directly to risk assessments, stock-rebuilding strategies, and the provision of scientific advice to decision-makers. This work has informed briefings to the Minister's Office, the Prime Minister's Office and Privy Council, the Cohen Commission of Inquiry, the Standing Committee on Fisheries and Oceans (FOPO), and numerous expert panels and strategic working groups.

Sustained, long-term molecular monitoring is essential for the long-term management of salmon populations. Interruptions to these programs weaken Canada's capacity to detect emerging threats, evaluate management actions, and uphold science-based decision-making, ultimately increasing risks for critically important (and imperilled) salmon stocks throughout Canada.

At a time when Canada is seeking stability amid economic and political pressures, protecting and recovering salmon populations should be a cornerstone of the country's future resilience. Continued investment in healthy salmon populations is critical to safeguarding local economies, advancing reconciliation commitments, maintaining public trust in fisheries management, and ensuring resilient ecosystems for future generations. We strongly urge for continued support for DFO's MGL Genomics Program, to continue supporting evidence-based management for salmon, now and into the future.

Signed,

Dr. Gideon Mordecai, Research Associate, University of British Columbia

Dr. Scott Hinch, FRSC, Distinguished Scholar, Professor and Associate Dean, University of British Columbia

Dr. Robert Lennox, Scientific Director, Ocean Tracking Network (Ocean Tracking Network), Associate Professor, Dalhousie University

Dr. Sarah (Sally) Otto, FRSC, FRS, Killam University Professor & Director, Liber Ero Post-doctoral Program

Dr. Michael Russello, Professor, University of British Columbia

Prof. Sean Godwin, Assistant Professor, University of California Davis and Adjunct Professor, Simon Fraser University

Dr. Will Bugg, University of British Columbia

Dr. Chris Darimont, Professor & Raincoast Chair of Applied Conservation Science, University of Victoria

Dr. Kristen Gorman, Assistant Professor, College of Fisheries and Ocean Sciences, University of Alaska Fairbanks

Dr. Øystein Wessel, Research scientist, Norwegian University of Life Sciences

Prof. Rick Routledge, Professor Emeritus, Simon Fraser University

Dr. Michael Price, Adjunct Professor, Simon Fraser University

Dr. Madison Earhart, University of British Columbia

Dr. Matthew Thorstensen, University of Toronto

Mack Bartlett, University of Victoria

Dr. Lawrence M Dill, FRSC, Professor Emeritus, Simon Fraser University

Kaytlyn Tasalloti, University of British Columbia

Dr. Dylan Shea, Senior Researcher, Norwegian Research Centre

Dr. Jan Grimsrud Davidsen, Research Professor, NTNU University museum

Dr. Ken Jeffries, Associate Professor, University of Manitoba

Prof. Jaime Grimm, Assistant Professor & Indigenous Science Scholar, University of Victoria

Dr. Emma Atkinson, University of Alberta