

From: Vivian Krause
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Date: 18 June 2009

To: Dr. David Suzuki, Founder
c/o Ms. Elois Yaxley, Executive Assistant
The David Suzuki Foundation
Suite 219, 2211 West 4th Avenue
Vancouver, BC, V6K 4S2
E-mail: elois@newdata.ca

c.c. Dr. Stephen J. Toope, President
Office of the President
The University of British Columbia
6328 Memorial Road
Vancouver, BC V6T 1Z2
E-mail c/o: patricia.stevens@ubc.ca

To: Dr. Mark Lewis and Dr. Martin Krkosek
c/o The Centre for Mathematical Biology
Dept. of Mathematical & Statistical Sciences
632 Central Academic Building
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Edmonton Alberta T6G 2G1
E-mail: mlewis@math.ualberta.ca and
mkrkosek@u.washington.edu

c.c. Dr. Indira Samarasekera, President
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3-1 University Hall
Edmonton, Alberta T6G 2J9
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To: Ms. Alexandra Morton
General Delivery
Simoom Sound, BC
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c.c. Dr. David H. Turpin, President
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To: Dr. John Volpe, Assistant Professor
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c.c. Dr. Suzanne Fortier, President
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350 Albert Street
Ottawa, ON, K1A 1H5
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c.c. Dr. Arvind Gupta, CEO
MITACS Inc.
Suite 301, Technology Enterprise Facility
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RE: SEA LICE RESERCH FUNDING

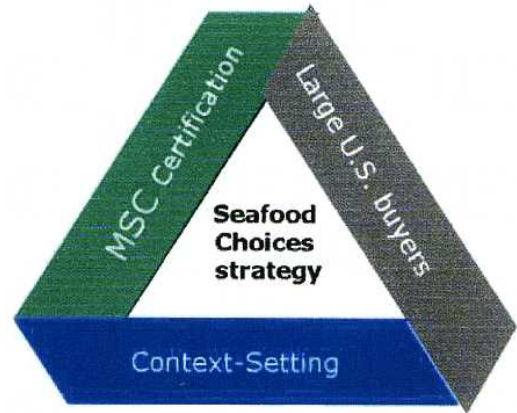
Your sea lice research and its media coverage has had a huge influence. More than 14,000 people have now signed a petition to have salmon farms removed from British Columbia. As such, I believe that it is fair to ask about the origins of your funding. This is an open letter.

Before I ask about your funding, I'll tell you about mine. As you know, during 2002 and 2003, I worked in the salmon farming industry. In 2007, I did one consultancy for Millerd Holdings Ltd. and one for Salmon of the Americas (a trade organization). I was paid \$10,000 and \$7,750, respectively. I have not worked for the salmon farming industry since 31 July 2007.

I am writing to you as a concerned member of the public. As background, the attached pages present my analysis and my opinions upon which my questions are based.

On the basis of my analysis and the information on which I relied, it appears to me that:

- The Centre for Mathematical Biology (CMB) has or had a "research partnership" with *SeaWeb*.
- Since 2000, the David and Lucille Packard Foundation has paid and granted \$17,915,645 to *SeaWeb*, including \$9,728,885 for Seafood Choices, a marketing strategy for shifting consumer and retailer demand towards MSC-certified products, most of which are Alaskan salmon.



Source: The David and Lucille Packard Foundation

- As shown below, *SeaWeb* was paid by the Gordon and Betty Moore Foundation to co-ordinate an "antifarming campaign" involving "integration of aquaculture science messages" and "earned media." According to the U.S. tax returns of the Gordon and Betty Moore Foundation, the purpose of this campaign was "to shift consumer and retailer demand away from farmed salmon."¹

SeaWeb		\$560,000	Apr. 2004
Wild Salmon, Consumers, and Conservation Project			
Term	Amount	Date Approved	
24 mo.	\$560,000	Apr. 2004	
Purpose			
This grant helps SeaWeb provide a toolkit and coordination for salmon aquaculture campaigns. Outcomes for this grant include identification of antifarming audience and issues, integration of aquaculture science messages into antifarming campaign, standardization of antifarming messaging tool-kit, creation of an earned-media campaign, and coordination of media for antifarming ENGOs.			
Grantee Websites			
SeaWeb ↗			

On 12 June 2009, the Gordon and Betty Moore Foundation confirmed to me that it granted funds to the David Suzuki Foundation and that the David Suzuki Foundation then re-granted part of those funds ("less than \$100,000") for sea lice research by Krkosek, Lewis and Volpe (2005). I would find it hard to believe that your sea lice work was funded by the same foundation that funded the co-ordination of the "antifarming campaign" but that your extensive, negative media coverage was not part of *SeaWeb*'s "earned media campaign" and the "Context Setting" of Seafood Choices.

According to Dr. Martin Krkosek, your sea lice research has received more than \$500,000 in "external funding."² Where did that funding originate? Attached, please find further questions.

Finally, as I appealed to you in my letter (attached) of 11 June 2009, I earnestly request that you publicly clarify that your actual research findings do not show that sea lice originating from salmon farms are causing high levels of mortality among juvenile salmon in the wild and putting their populations at risk of extinction.

Sincerely,

Vivian Krause

¹ <http://moore.org/files/2005-grants-paid.pdf> Statement 6A. Page 11.

² http://www.math.ualberta.ca/~mkrkosek/Krkosek_CV.pdf Page 2.

Questions:

1. **NSERC and the Pacific Salmon Forum** - What are the amounts of public funds granted by the Natural Sciences and Engineering Research Council of Canada (NSERC) and the B.C. Pacific Salmon Forum?
2. **MITACS** - According to a document (excerpt attached) from the University of Alberta, the CMB received \$467,000 from Mathematics of Information Technology and Complex Systems (MITACS). Where did the \$467,000 originate?
3. **Raincoast Research Society** - What is the source of the \$252,325 in grants that Raincoast Research Society received in 2005, 2006 and 2007?
4. **The David Suzuki Foundation** - What is the amount in dollars granted by the David Suzuki Foundation? Did these funds originate only with the Gordon and Betty Moore Foundation or from other sources as well?
5. **Finest At Sea Ocean Products** - The CMB reports that six per cent of the sea lice research funds originated from the Canadian Sablefish Association (4 per cent) and Finest At Sea Ocean Products (2 per cent). What are the amounts of funds provided by Finest At Sea Ocean Products and the Canadian Sablefish Association (CSA)? Where did the CSA funding originate?
6. **The David and Lucille Packard Foundation** has granted \$14,110,239 to Tides Canada Foundation, including at least \$346,500 for the start-up of the Coastal Alliance for Aquaculture Reform (CAAR). The David Suzuki Foundation and Raincoast Research Society are founding members of CAAR. In a sea lice research paper published in 2005, Alexandra Morton acknowledges funding from "Tides Canada." Has your sea lice work received funds from Tides Canada Foundation that originated from the David and Lucille Packard Foundation? If not, what is the origin of the funds from Tides Canada Foundation?

Attachments:

1. Sea Lice Research Funding: Background Information. Prepared by Vivian Krause. 17 June 2009. (11 pages).
2. Pages from U.S. tax returns and on-line databases showing \$9,328,431 paid or granted from the David and Lucille Packard Foundation and the Gordon and Betty Moore Foundation for anti-farmed salmon campaigns (2000 - 2008). (21 pages).
3. Pages from U.S. tax returns and the on-line database of the David and Lucille Packard Foundation showing \$18,537,730 paid or granted for certification by the Marine Stewardship Council (2000 - 2008). (19 pages).
4. Pages from U.S. tax returns and the database of the David and Lucille Packard Foundation showing \$9,728,885 paid or granted for Seafood Choices and the sustainable seafood movement. (11 pages).
5. Pages from the on-line database of the David and Lucille Packard Foundation showing \$5,745,979 granted for work with Wal-Mart suppliers and other "major buyers" and seafood retailers. (5 pages).

FUNDING INFORMATION POSTED ON-LINE BY THE UNIVERSITY OF ALBERTA

See <http://www.math.ualberta.ca/~mlewis/SeaLice/Grant&Fellow-Salmon.pdf>

Ecology of sea lice and salmon

Data collection and mathematical analysis of sea lice and salmon population ecology.

This is a joint project between the University of Alberta (Lewis, Krkosek) and the University of Victoria (Volpe). Collaborators include Alexandra Morton (Salmon Coast Research Station).

Funding has come from NSERC (29%), Pacific Salmon Forum* (20%), MITACS National Centre of Excellence (19%), David Suzuki Foundation* (13%), University of Alberta Fellowships (5%), National Geographic Research and Exploration Grant (4%), The Canadian Sablefish Association* (4%), BC Wilderness Tourism Association* (3%), Finest at Sea* (2%), Raincoast Conservation Society (1%), Watershed Watch* (0.2%), and Canadian Society of Zoologists Leo Margolis Scholarship (0.1%).

We acknowledge in-kind assistance with field studies from Salmon Coast Research Station, Knight Inlet Lodge and numerous volunteers.

Percentages are approximate. Approximately $\frac{3}{4}$ of the funding is from government and university sources. Asterisks indicate nonacademic participants who support the MITACS Network for Biological Invasions and Dispersal Research, which provides funds for the research. MITACS is a Canadian National Centre of Excellence whose funding is administered via peer review. Grant and fellowship funding is acknowledged in scientific publications arising from the research. Due to time periods covered by each funding source, not all publications acknowledge each funding source.

**AN EXCERPT OF A DOCUMENT DATED 11 OCTOBER 2006
FROM THE CENTRE FOR MATHEMATICAL BIOLOGY
TO THE ADMINISTRATION OF THE UNIVERSITY OF ALBERTA**

APPENDIX A: Multidisciplinary Working Teams

Of the approximately one dozen multidisciplinary working teams at the Centre that were active during 2002-6, the largest are given below.

Date	Group	Goal	Total \$	Centre \$	Investigators
02-07	Ecological Forecasting and Risk Analysis of Nonindigenous Species	US/Canadian international collaboration on bioeconomic analysis of control invasive species	685,292 plus US 2,989,654 (NSERC CRO, US NSF)	685,292 plus 69,295 plus US 280,000	Lewis (Alberta NSERC PI), Lodge (Notre Dame US NSF PI), MacIsaac (Windsor) others
01-07	Mathematical Modelling in Pharmaceutical Development	Industry/Academic collaboration on drug design, chemotherapy, protein dynamics	450,000 (MITACS industrial)	24,000 plus 40,942	Tuszynski (PI), deVries, Hillen (Alberta), others
04-07	Mountain Pine Beetle (MPB)	Forestry/Academic collaboration on spread of MPB in BC and Alberta	394,090 (NRCan)	394,090	Lewis (PI), He (coPI), Lele (Alberta)
03-07	Network for Biological Invasions and Dispersal Research	Industry/Academic collaboration on invasive species research	467,000 (MITACS industrial)	170,887	Lewis (Alberta), Watmough (UNB, PI), others
06-11	Canadian Invasive Aquatic Species Network	Fisheries and Oceans/Academic collaboration on spread and control of aquatic invaders	3,781,944 (NSERC, DFO)	TBA, approx 150,000	Lele, Lewis (Alberta), MacIsaac (Windsor, PI), others
03-05	Collaborative Research Group in Ecology and Evolution	Collaboration between PIMS University members in math ecology and evolution	approx 190,000 (PIMS)	approx 90,000	Hillen, Lewis (Alberta), McCauley (Calgary), Doebeli (UBC)
02-05	Complexity across boundaries coupled human and natural systems in Yellowstone	Model human disturbance and its impact on Yellowstone	US 1,971,993 (US NSF)	US 72,000	Lewis (Alberta), Crabtree (YERC), McGuinness (Iowa, PI) others

The **bold faced** dollar figures are amounts coming through Centre accounts (accounts of Lewis, deVries or Hillen) over the duration of the project. The **underlined bold faced** dollar amounts are amounts paid to support people/activities at the Centre through non-Centre accounts. In the case of PIMS, the underlined amount is support for postdoctoral fellows, seminar, distinguished chair speakers, summer school and so forth at the Centre, which PIMS controlled from separate accounts. In the case of US NSF and MITACS, underlined amounts were paid from non-Centre accounts to support research associates, postdoctoral fellows or graduate students at the Centre.

In addition, there were over one million dollars in additional funds for single investigator accounts (not including any startup accounts) during 2001-7 period, including NSERC Discovery **\$444,581**, CRC T1 Research Account **\$414,000**, CFI/AB IS matching **\$189,626**.

SEA LICE MEDIA COVERAGE REPORTED BY THE UNIVERSITY OF ALBERTA

See <http://www.math.ualberta.ca/~mlewis/news/SeaLice%20media.htm>

On 12 June 2009, the Gordon and Betty Moore Foundation confirmed that it provided funding for the sea lice research published in Proceedings of the Royal Society of London, Series B, in 2005. Over the same period, the Moore Foundation also funded SeaWeb to co-ordinate an "antifarming campaign" involving "earned media."

Shown below is a web-page from the University of Alberta's web-site.



Television

- CBC Newsworld Kathleen Petty interviews researcher M. Krkosek (link to [video](#))

Radio

- NPR John Nielsen interviews researcher J. Volpe (link to [radio](#))
- CBC "Maritime News" interviews researcher M. Krkosek (link to [radio](#))

Newspaper (selected)

- Folio/ExpressNews (UofA) by Scott Lingley- published [March 29, 2005](#).
- Edmonton Journal
- Globe and Mail article by Mark Hume - published [March 30, 2005](#)
- Macleans article by Jeremy Hainsworth - published [March 29 2005](#)
- USA Today by Elizabeth Weise - published [March 30, 2005](#)
- SanFrancisco Chronicle by John Heilprin - published [March 30, 2005](#)
- New York Times by Cornelia Dean - published [March 30, 2005](#)
- Science Now by Amitabh Avasthi - published [March 30, 2005](#)
- Guardian UK News by Tim Radford - published [March 30, 2005](#)

In 2007, Dr. David Suzuki was asked repeatedly about whether the publicity of sea lice research at this particular web-page was part of the "earned media" of the antifarming campaign.

AN OPEN LETTER TO DAVID SUZUKI
PUBLISHED BY BUSINESS IN VANCOUVER, 30 OCTOBER 2007

Business in Vancouver October 30–November 5, 2007

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LETTERS

**Research claims about salmon and sea lice
leaving too many questions unanswered**

Sea lice have become the mushroom cloud of salmon farming.

Recently, **David Suzuki** and others wrote to Prime Minister **Stephen Harper** and Premier **Gordon Campbell** stating that “in some cases, sea lice originating from salmon farms are estimated to have killed up to 95% of the wild juvenile salmon.” Actually, the estimate derived from that research was 9% to 95%, and it provided no proof that the sea lice originated from salmon farms. Wild sticklebacks, herring and rockfish also carry sea lice. During part of the research, there weren't even fish at the farm!

The **Association of Aquatic Veterinarians of British Columbia** described sea lice research funded by the **David Suzuki Foundation** as “too simplistic in its approach and therefore potentially seriously misleading in its conclusions.” It added that “the conclusions of the article are too sweeping and not supported.”

Suzuki's letter said “the science is clear” and “there are no scientific studies to the contrary.” Sea lice research funded by the **David Suzuki Foundation** was publicized by an American organization called **SeaWeb** while it was funded by the **Gordon and Betty Moore Foundation** for “integration of aquaculture science messages into an anti-farming campaign,” “standardization of anti-farming messages,” an “earned media campaign” and “co-ordination of media for anti-farming ENGOs (environmental non-governmental organizations).”

Since 2001, the Moore Foundation has granted \$20.2 million to environmental organizations in British Columbia. The Alaska Seafood Marketing Institute has acknowledged working with environmental organizations and “lots of private foundation money.” When sea lice research is publicized, policy makers and the public need to ask whether this is to protect wild salmon or to shift consumer demand away from farmed salmon and improve the market for Alaskan “wild” salmon. As a concerned member of the public, I wrote an open letter to Suzuki pointing out that sea lice research was inaccurately presented and important information was not included in his open letter to the prime minister and the premier. My letter also reiterates the questions to Suzuki from my detailed 27-page May 11, 2007, letter regarding his apparent involvement in the marketing of Alaskan “wild” salmon and the demarketing of farmed salmon:

- is sea lice research one of the “aquaculture science messages” of the “anti-farming campaign” funded by the Moore Foundation?
- is publicity of sea lice research part of the “earned media” to shift consumer demand away from farmed salmon?
- is the **David Suzuki Foundation** one of the environmental organizations that is working with the Alaska Seafood Marketing Institute?

My questions to David Suzuki are fair. His response is overdue.

*Vivian Krause
North Vancouver*