

## A conversation with Jim Gower - B.C. ferry data pioneer

Submitted by Virginia Keast Thu, 2015-07-30 08:48



### **Q. What inspired you to choose your path in physical oceanography?**

I was an assistant professor in radio astronomy at the University of British Columbia (UBC) when asked if I was interested in being a "Satellite Oceanographer" for a new Federal ocean institute on the west coast—the equivalent of the Bedford Institute on the east coast.

### **Q. How would you describe your research interests?**

My specialty since then has been the use of satellites and other "remote sensing" methods in oceanography. Water colour and chlorophyll fluorescence have long been a central interest, but I've also worked on altimetry, imaging radar and other satellite, aircraft and land-based sensors.

### **Q. Why is it important to study our local waters in the Strait of Georgia?**

I was a member of the National Aeronautics and Space Administration (NASA) team for ocean color and also on the European Space Agency (ESA) team for the Medium Resolution Imaging Spectrometer (MERIS) sensor, which was based on our design.

It was very satisfying to see and describe events round the world that had previously passed undetected. But local waters have the attraction of being where we can make our own in-situ measurements, or better yet, have someone else, like ONC, make them for us.

### **Q. How did you come to use the BC ferries to collect your data?**

While MERIS was operating, ESA stored a data set for us covering the Gulf Islands and Strait of Georgia. The BC ferries data help us interpret what the satellites see. I started installing instruments around 2000 on the MV *Spirit of Vancouver Island* (SOVI). It was the only practical ferry for us, as it's based at Swartz Bay, close to the Institute for Ocean Sciences (IOS).



Fig.1 ? The MV *Spirit of Vancouver Island* crosses the southern Strait of Georgia between Tsawwassen (near Vancouver) and Swartz Bay (near Victoria), eight times daily.

### **Q. Has the data and infrastructure from the ferry sea surface monitoring system been helpful to your research?**

Definitely. In passing the SOVI monitoring on to ONC in 2014, I've seen it expand from the salinity, chlorophyll, fluorescence and occasional turbidity that I collected, to include Coloured Dissolved Organic Matter (CDOM) and data collection on a wider range of ferries.

### **Q. What is keeping you busy today?**

I'd also like to use the ONC observations on the *Queen of Alberni* ferry to refine the link between satellite and in-situ observations. Currently, I use NASA's Moderate Resolution Imaging Spectroradiometer (MODIS) sensors. This year, we're seeing warm coastal water temperatures from the 'blob' in the Gulf of Alaska, a gathering El Niño on the equator to the south of us, and especially intense (Algal) blooms on the coast.

*\*Note: this interview has been edited for length and content.*

## Tags:

- [Gower](#)
- [BC Ferries](#)
- [ferry data](#)

## Categories:

- [Science Highlights](#)

```
// FIXES AMPERSAND IN BREADCRUMB var ONC_breadcrumb =  
document.getElementById("breadcrumb"); if (ONC_breadcrumb) { var ONC_innerHTML =  
ONC_breadcrumb.innerHTML; ONC_innerHTML = ONC_innerHTML.replace("&", "&");  
ONC_breadcrumb.innerHTML = ONC_innerHTML; }
```

## Highlights

- [Audio](#)
- [Data](#)
- [Learning](#)
- [Science](#)
- [Video](#)

## Reading Room

- [Active Research](#)
- [Backgrounders](#)
- [FAQs](#)
- [Glossary](#)
- [News Briefs](#)
- [News Stories](#)
- [Newsletters](#)
- [Publications](#)

## Cool Stuff

- [Apps](#)
- [Digital Fishers](#)
- [iBooks & e-Pubs](#)
- [Live Video](#)
- [Maps](#)
- [Images](#)
- [State of the Ocean](#)

## Data & Tools

- [Apps](#)
- [Data Plots](#)
- [Data Search](#)
- [Data Policy](#)
- [Data Help](#)
- [OPeNDAP Web Services](#)

## Opportunities

- [Calendar](#)
- [Educator Opportunities](#)
- [Global Partnerships](#)
- [Industry Network](#)
- [Jobs](#)
- [Staff List](#)
- [Technology Services](#)

## Sites & Instruments

- [Arctic Sites](#)
- [Northeast Pacific Sites](#)
- [Salish Sea Sites](#)
- [Notice to Mariners](#)

## Follow Us



[Sign up for our newsletter](#)

## Feedback

Send us your questions and comments \*

How could we improve this page?

Your Name

Your Email \*

Your Location

CAPTCHA

This question is for testing whether or not you are a human visitor and to prevent automated spam submissions.



What code is in the image? \*  
Enter the characters shown in the image.



[About Us](#) | [Contact Us](#) | [Media Relations](#) | [Legal Notices](#)

© Ocean Networks Canada. All rights reserved. 2474 Arbutus Road, Victoria, BC, V8N 1V8  
| 1.250.472.5400

```
(function () { var d = new Date; var year = d.getFullYear();  
document.getElementById("copyright-date").innerHTML = year; })();
```

---

**Source URL:** <https://www.oceannetworks.ca/conversation-jim-gower-bc-ferry-data-pioneer>