

## Report on Visiting Researchers Collaboration

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**Collaboration between the UPEI Center for Aquatic Health Sciences, the Department of Fisheries and Oceans in St. Andrews NB, and the Department of Oceanography at the University of Dalhousie.**



Dr. Fred Page (left), the Head of the Coastal Oceanography Section (COS) at the Department of Fisheries and Oceans (DFO) St Andrews Biological Station (SABS), and Dr. Jon Grant (right), the NSERC-Cooke Industrial Research Chair in Sustainable Aquaculture at the University of Dalhousie. Both visited the Atlantic Veterinary College (AVC), from July 21 to 25, 2014, to work on developing a collaborative program between the three centres, focusing on ecosystem-based research and oceanography, to improve the health of fish, the environment, and to promote a sustainable aquaculture industry on the east coast of Canada.

During their visit, we held a morning seminars series, titled “Application of oceanography in fish health research,” and heard presentations from Drs. Vanderstichel, St-Hilaire, Arriagada, Hammell, Boerlage, Page, and Grant. We also held several meetings, to provide opportunities for everyone in the aquatic group at AVC to meet with Drs. Page and Grant. We discussed and identified various sources of funding for future projects, and one outcome from these meetings is that we have decided to apply for an NSERC Strategic Network grant in Coastal Marine Aquaculture Health.

Dr. Page stayed an extra week to discuss more specific details on ocean circulation models for our larger project, aimed at predicting the movement of pathogens between farms in New Brunswick. With Dr. Page, we reviewed the biology of the sea lice that will affect the hydrological dispersion of the parasite, discussed the differences between various hydrological models developed by DFO, and briefly explored the industry data for validating the hydrological models. We developed parameters for particle tracks, and organized timelines and tasks with the short-term goal of producing two manuscripts: 1) evaluation of the sensitivity of ocean circulation models (comparing outputs from several ocean models), to be led by Dr. Page; and 2) prediction of transmission patterns of sea lice from one selected ocean circulation model, to be led by Dr. Vanderstichel.

The visits by Drs. Page and Grant successfully forged stronger ties between the three centers, and enhanced communication between our disciplines. The timing of this visit coincided very well with the start of a new project, and allowed us to line up our mutual interests and clarify our roles for studies, projects, and programs. The visit also facilitated training of one PhD student (Arriagada) and two Post-doctoral students (Boerlage and Gautam).