

Applied Research
Technology
Innovation

Applied Research Partnerships Economic Development Division Webinar Series: March 6, 2018

Connecting Communities Through Research on Vancouver Island





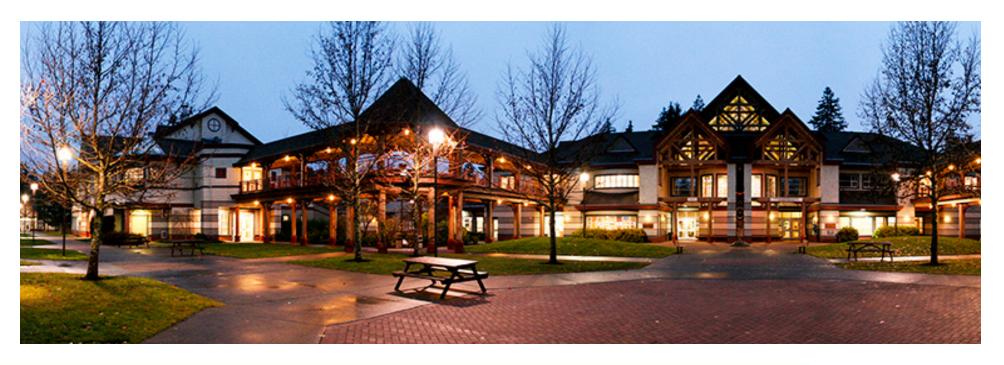






#### About North Island College

- Serve 9000+ students (2400 FTE)
- 43 years of in-community and distributed learning





### **About North Island College**

- Four campuses and one learning centre
  - Comox Valley
  - Campbell River
  - Port Alberni
  - Mt Waddington (Port Hardy)
  - Ucluelet





# Centre for Applied Research, Technology and Innovation (CARTI)

 Coordinating innovative projects that link that needs of business and industry with College student and faculty expertise.





## "Research" in a College Context

Applied research focuses on solving practical problems in the real world

This is different than "pure" or "discovery" research that tends to be theory based





#### Partnership Example - AQUACULTURE

- Important economic sector on Northern Vancouver Island
- 6,600 jobs and \$1.5 billion towards BC economy
- Finfish and shellfish
- NIC aquaculture experts and students work with several companies to find solutions to industry challenges.





#### Partnership Example - AQUACULTURE

- Han Pacific Shellfish on Denman Island
- Partnership to explore effective ways to reduce predation of oyster seed by crabs.
- \$25,000 grant from NSERC to support 3 students and one faculty member to investigate including purchasing of netting materials.





### Partnership Example - AQUACULTURE

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- Funding included purchase of netting materials.





# Partnership Example – Aquaculture and Eelgrass

- Eelgrass serves a critical function in estuaries and some feel that it adds a sweetness to adjacent oysters.
- Eelgrass is twice as effective in carbon sequestration as trees.
- Assessing eelgrass distribution to aid in placement of future shellfish farms.
- \$25,000 grant from NSERC to support 2 students and one faculty member to investigate, including diver surveys





# Partnership Example – Social Procurement Policy

- Investigating required policy changes and barriers to large institutions purchasing local food using social procurement framework.
- Implemented by North Island College, St. Joseph's Hospital and Glacier View Lodge.
- \$100,000 grant from McConnell Foundation and Comox Valley Regional District.





# Partnership Example – FILM INDUSTRY

- Opportunity to build film sector and supporting trades on Vancouver Island.
- BC film industry is valued at \$3B; total for all of Canada is \$4.4B
- NIC received almost \$500,000 to support film training, based on the request for support from local government and regional sector expertise.
- 137 grips, set designers, production assistants and lighting technicians have been trained.







# Partnership Example – Indigenous Language and Leadership

- The project gathered knowledge from local Kwakwaka'wakw Elders, exploring leadership language and concepts.
- Insights from the project will be used to develop a youth leadership camp.
- SSHRC provided almost \$25,000.

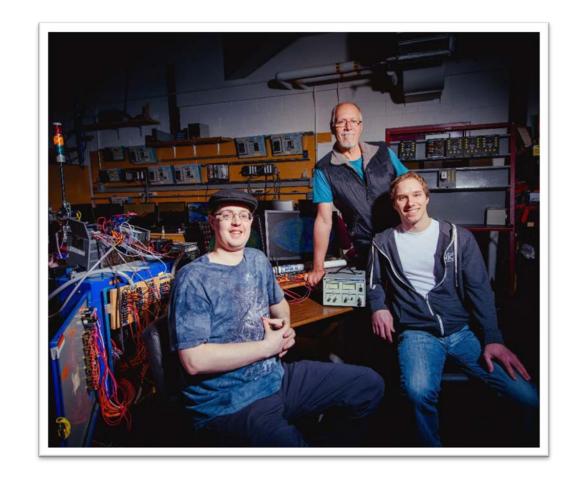


Photo credit: Macleans Magazine 2016



## Partnership Example – Remote Sensing Tech

- Island Telemetrics needed to develop technology to stream sensor data to the cloud for realtime access.
- Two students built the prototype control boards, linked to the software and conducted testing for a remotely operated water quality monitoring system.





### Partnership Example – Shellfish Sector Health

- Shellfish sector wanted to new, faster, less expensive screening test for shellfish disease.
- One faculty member and one student developed a new assay.
- NSERC provided \$25,000
- Next step is to ground truth the new assay against the existing testing available.





#### More information



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