Nova Scotia Productivity and Innovation Voucher Program
Program Service Provider Information Form

Organization	Nova Scotia Agricultural College			
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Primary Organizational Contact	**Name**	**Title**	**Phone #**	**E-mail**
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Proposed Services

1. Applied research and Scientific/technology related advice and support–

a. Atlantic BioVenture Centre (ABVC) is able to conduct applied research at its laboratory situated at AgriTECH Park, Truro, NS; much of the research to date has focused on value addition of small fruits through the extraction of bio-active compounds such as flavanoids which are rich in anti-oxidants and can play an important role in health maintenance and wellness. Experiments conducted at bench top level can be scaled up and tested in a micro-processing facility also located on site at AgriTECH Park.
b. AgriTECH Park Inc. is a division of NSAC which acts as a science and incubator park for food and agricultural business development.
c. Atlantic Poultry Research Institute – this facility is a state-of-the-art, one-of-kind Level 1 bio-containment facility offering research and development services primarily to the poultry industry. It offers facilities for poultry grow-out (layers, broiler and turkeys) in environmentally controlled conditions combined with a hatchery and on-site processing unit for full-life-cycle study capabilities.
d. Performance Genomics Incorporated – operates a Specific Pathogen Free (SPF) Level 2 bio-containment facility housing a mouse colony bred for reproductive longevity. PGI offers research services utilizing their mouse colony, its genetic database and can conduct contract research on other mice in their facility.
e. Energy – NSAC researchers are conducting research and adaptation in utilizing biomass for bio-energy and implementation of numerous energy development and conservation technologies, particularly adaptive to the agricultural sector and agri-industry. NSAC has facilities to conduct combustion research for bio-fuel development.
f. Food Technology – through the Engineering department, the Atlantic Bio-Venture Centre and the Bio-Products Research Lab in the Environmental Sciences department, NSAC can conduct research into new value-added food and feed products through improved processing and bio-active fractionation and analysis technologies.
g. Air, Water and Waste Management – NSAC Engineering has expertise and unique facilities through the Bio-Environmental Engineering

Centre (BEEC) (http://www.beec.ca/), which is a state-of-the-art environmental research and development complex used to conduct research and development in areas of air quality, alternative energy, soil and water quality and waste management.

h. Atlantic Research Centre for Agricultural Genomics – this facility offers services to NSAC researchers and industry partners utilizing many of the procedures that are similar to the analysis methods used by laboratories working in the human genomics and forensics sectors, such as parentage testing and DNA profiling. Services available include DNA sequencing, automated DNA/RNA extraction, SNP interrogation by 'Single Base Extension', microsatellite analysis, with new services in 2009 to include genotyping on ABI 7900HT platform and LIMS sample tracking.
i. Organic Agriculture Centre of Canada is a nationally recognized centre for organic agriculture research and development. Work supports the development of the sector through advocacy and policy development, production technologies, product development and education.
j. Lab Services – NSAC has a large range of scientific equipment to support its applied research focus. Specifically for companies seeking to develop value-added agri-food and other bio-products, the Atlantic BioVenture Centre's *Product Development and Analytical Laboratory* contains specialized equipment that may be useful to SME's in the bio-science and food product development sector, such as colorimeter, micro-plate reader, autoclave, freeze dryer, etc. Food product technical support is also available through the Atlantic BioVenture Centre. *The Bio-Products Research Lab* offers natural products chemistry; plant secondary metabolites: phenolics and isoprenoids; structure-activity relationship of flavonoids; bio-active phytochemicals of fruits, their health benefits and mode of action. It also works in postharvest biology and technology of fruits; fresh-cut and minimally processed technologies; shelf life and quality. The *Atlantic Research Centre for Agricultural Genomics* offers genomics services to the agricultural sector, as noted in (h) above. The *Marine Bio-Products Research Lab* offers an array of services focusing on novel uses of marine organisms or byproducts for plant and animal health through bioprospecting for bioactives to enhance performance under biotic and abiotic stresses and understanding the mode of action.

2. Proof of Concept, Field Testing and Product Evaluation – NSAC is able to conduct a wide range of proof of concept, field testing and product evaluation work for companies in the agri-bio/food sector; facilities for field testing sites are also available through AgriTECH Park lands and other sites managed by the Nova Scotia Agricultural College.

3. Product design – Atlantic BioVenture Centre has access to product and package design expertise in the Truro area and has sub-contracted with this company in the past; prototype packaging, package performance testing, design of packaging fulfilment operations and identification of co-packaging opportunities are services that are available to SME's. The Business and Social Sciences department at NSAC is willing to collaborate on market analysis and other studies to assist with business innovation.

4. Feasibility studies, market validation - The Business and Social Sciences department at NSAC is willing to collaborate on market analysis and other studies to assist with business innovation. NSAC has excellent relations with business development centres and agencies such as AgraPoint International and can collaborate with these entities on feasibility studies in specific areas relating to food and agri-bio innovation.

5. Eco-efficiency audits – In cooperation with our Farm Energy Conservation Research Chair and the Farm Energy Audit program, NSAC has expertise and resources available to conduct and implement energy audit, conservation and small-scale energy development projects.

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