



# The Prince Edward Island Bioscience Cluster



## Overview

The Prince Edward Island Bioscience Cluster is the location of choice for companies engaged in the research, development, and commercialization of bioactive-based human, animal, and fish health and nutrition products. Since 2005, **the PEI Bioscience Cluster has more than tripled in size**, with remarkable growth in business revenues and employment, and a marked increase in private and public-sector investments in our companies.

## PEI Bioscience Cluster Metrics

- **54 companies**
- **Over \$240 million per year in private sector revenue**
- **1,600 sector employees**
- **110 new bio-based jobs in PEI since January 2018**
- **Over \$21 million in follow-on capital investments**

## Key infrastructure

PEI BioAlliance is home to the Emergence **Bioscience Business Incubator**, a national program supporting startup and scale-up companies from across Canada. A virtual incubator, the program serves high-potential companies from across Canada, while also providing a “soft landing” for innovative international ventures seeking to start-up or establish themselves in, or expand into, North America. Emergence serves a portfolio of **66 mostly startup and early-stage ventures, which have, collectively, raised over \$108 million in follow-on funding**, achieved revenues of \$105 million, and created 193 new jobs.

PEI is also home to **Natural Products Canada Inc.** – Canada’s Centre of Excellence for the Commercialization and Research of natural products – which **received \$14 million in funding** by the National Centres of Excellence to accelerate the commercialization of new products and technologies derived from natural products.

The BioAlliance is home to a **new suite of fermentation and downstream processing equipment** for the biotechnology industry. Located at BioFoodTech on the UPEI Campus, the new suite includes: 1250 litre dual jacket fermentation unit; a Westfalia separator/centrifuge; a Dominion & Grimm Reverse osmosis unit; and a pilot spray drying system.

## Human Resources

The PEI Bioscience Cluster achieves high recruitment success and retention rates. By maintaining an extensive and current database and resume file of those seeking employment, including: Scientists/researchers; quality assurance/control specialists; production/engineers; and business development/administrators, we coach job seekers on accessing opportunities, and we promote industry job postings and organize networking events for our cluster. The BioAlliance collaborates with national organizations, such as **BioTalent Canada**, and local post-secondary institutions to supply talent to bioscience companies. **Holland College offers a two-year Bioscience Technology Program** and, in cooperation with UPEI, a **Bachelor of Science, Biotechnology**. **The University of Prince Edward Island (UPEI)** has undergraduate and graduate programs that include science, engineering, computer science and business. **Skills PEI offers programs that support recruitment and training**. And the PEI BioAlliance has connections to tap into international talent through the **Canadian Association of Newcomers to PEI** and through **UPEI’s International Student Office**.

## Highlights

### Recent Expansions

- PEI company, Advanced Extraction Systems Inc. (AESI), has partnered with Organigram Holdings Inc. to build the first in a series of custom CO2 Supercritical Fluid Extraction (SFE) Systems for producing high-quality cannabis extracts on a commercial scale.
- BioVectra further expands its footprint in Atlantic Canada, with major renovations and new equipment purchase for its manufacturing facility in Windsor, Nova Scotia. This follows a recent expansion to its Charlottetown airport facility including 21,000 square ft., \$4 million warehouse process development suites.
- The BioAlliance has added to manufacturing scale-up resources at BioFoodTech with a new \$1 million fermentation and downstream processing equipment suite.
- Croda International's acquisition of Nautilus Biosciences will establish Nautilus as the Croda Centre of Innovation for Marine Biotechnology at UPEI.
- Dosecan, an innovative cannabis value add company, is completing renovations to a 44,000 square ft. building in the PEI BioCommons.

## In the News

### **Atlantic Canada's Bioindustry Attends North America's Largest Biotechnology Conference**

The BioAlliance led over twenty-five biotechnology companies and research organizations from Atlantic Canada to attend the 2018 BIO International Convention and Trade Show in Boston, Massachusetts June 4 – 7th. With over 1,000 Canadians in attendance, this year's event broke the Guinness World Book of Records for the number of business partnering meetings held during the event (over 47,000)!

### **New Biofutures Project a Success**

A new project that gives senior 4-H students in PEI a hands-on introduction and education on the potential for careers in the bioscience industry successfully wrapped up a six-week program. Organized by the BioAlliance in partnership with 4-H PEI, there are plans to expand the program for next year.

### **Advanced Extraction Systems Inc. Completes Sales Agreement for New High Capacity Supercritical CO2 Extraction System**

Advanced Extraction Systems Inc. (AESI) has announced the completion of an agreement with Organigram Holdings Inc. (TSX VENTURE: OGI) to build the first in a series of custom CO2 Supercritical Fluid Extraction (SFE) Systems for producing high-quality cannabis extracts on a commercial scale.

### **Windsor Expansion Helps Biovectra Meet Global Market Demand**

BioVectra is expanding its footprint in Atlantic Canada, building on recent renovations and expansion to its Charlottetown facilities. They recently announced a \$5 million expansion to help the biotechnology and pharmaceutical ingredient manufacturing company expand its operations in Windsor, Nova Scotia, enabling the PEI-based company to further grow and create additional highly skilled positions in Atlantic Canada.

### **Atlantic Canada's Ocean Supercluster Successful**

The Atlantic Ocean Supercluster proposal has been successfully selected as one of five new national clusters announced by the Federal Government. The BioAlliance is a member of the Oceans Supercluster team, representing marine biotechnology and fish health and nutrition capabilities in the region.

### **Dosecann Inc. Acquired For \$38 Million**

Dosecann Inc. recently announced a \$38 million acquisition agreement with Cannabis Wheaton of Vancouver, B.C.. Dosecann is completing the buildout of a 42,000 square foot GMP compliant facility in the BioCommons Research Park in Charlottetown to accommodate product development, extraction, formulation, and filling. Dosecann is developing a suite of cannabis products across a variety of delivery methods for both the medical and adult use markets. And the company recently hired several new employees in PEI.

## PEI BioAlliance 2018 International Events

### **BIO 2018**

The PEI BioAlliance led the Atlantic Canada delegation to the BIO 2018 International Convention & Trade Show in Boston, Mass in June 2018

### **NeuroConX 2018**

The global science and business conference connecting brain health and natural products  
**July 7 - 9**, Charlottetown, PEI

### **ISAAH 2018**

8<sup>th</sup> International Symposium on Aquatic Animal Health  
**September 2 - 6**, Charlottetown, PEI