CENTRE FOR APPLIED RESEARCH AND INNOVATION

INNOVATIVE SOLUTIONS TO REAL-LIFE PROBLEMS

CARI YEAR IN REVIEW

2019/2020

30

RESEARCH STAFF AND LABS	**45** staff **15** labs **$34M** equipment **37,000** sq ft lab space
FACULTY AND STUDENTS	**542** students engaged **224** faculty engaged **20** student researchers
EXTERNAL FUNDING	**$2M** project grants
INDUSTRY LIAISON	**241** industry engagements **38** industry projects
BUSINESS DEVELOPMENT AND PROJECTS	**69** active projects **7** contracts **8** prototypes **40** completed projects
RECOGNITION	**8** awards **160** media mentions **126** publications/presentations **9,000** social media impressions **17,268,000** total reach from media
EVENTS AND TOURS	**29** tours **57** events **19** international engagements

Applied research at BCIT is exciting. It creates practical learning opportunities for BCIT's students, provides innovative solutions to industry challenges, and produces new, commercially relevant technology products and applications.

BCIT researchers and research groups have been working with industry clients, celebrating 30 years of helping companies and organizations develop new technologies, products and services.

For more information visit **bcit.ca/appliedresearch.**

MAKE+ TEAM

NATURAL HEALTH AND FOOD PRODUCTS RESEARCH GROUP (NRG)

SMART MICROGRID APPLIED RESEARCH TEAM (SMART)

APPLIED RESEARCH LIAISON OFFICE TEAM (ARLO)

BCIT CENTRE FOR APPLIED RESEARCH AND INNOVATION

4355 Mathissi Place
Burnaby, BC V5G 4S8

bcit.ca/appliedresearch

BCIT®

The Centre of Applied Research and Innovation (CARI) is the home of state-of-the-art labs and three dedicated BCIT research groups:

MAKE+ Product Development team is an interdisciplinary research group focused on product development, applied research and education. The team is capable of taking complex projects and ideas from requirement discovery and concept development through to certification and product validation.

The **Natural Heath and Food Products Research Group (NRG)** concentrates on issues related to natural health and food product quality, process movement, and human health. NRG's goal is to ensure that all Canadians can achieve the potential health and economic benefits offered by natural health products, medicinal plants, and food products

The **Smart Microgrid Applied Research Team (SMART)** converges expertise in the information technology, communications engineering, and energy management fields to develop prototypes and solutions for complete applied research problems. SMART helps stimulate BC's economy through collaborative projects with other academic institutions, industry, and government.

The **Applied Research Liaison Office (ARLO)** provides a wide range of support services and guidance to faculty, researchers, students, and industry partners. ARLO helps facilitate solutions to industry challenges, creates beneficial partnerships and practical learning opportunities for students, assists faculty and researchers with their research programs.

A FEW 2019/2020 HIGHLIGHTS

- **BCIT's Centre for Applied Research and Innovation (CARI) turns 30!**

  Over the past 30 years, BCIT's Centre for Applied Research and Innovation has established itself as an innovation hub serving local and international partners.

- **BCIT Applied Research 2020 Cleantech Award Winner**

  Foresight Cleantech Accelerator Centre awarded BCIT Applied Research and the Smart Microgrid Applied Research Team the 2020 Cleantech Educational Institution

- **BCIT SMART NuGrid Medium Voltage Testing Laboratory completed**

  This testing lab adds another state-of-the-art technology development platform to the BCIT Smart Microgrid capabilities.

- **AAPLEwalk™: BCIT designs exercise machine for people with disabilities**

  The BCIT Rehabilitation Engineering Design Lab (REDLab) designed a prototype of a revolutionary exercise machine for people with disabilities.

- **This BCIT research team is testing for ethanol levels in kombucha**

  The BCIT Natural Health and Food Products Research Group (NRG) is collaborating with the BC Centre for Disease Control (BCCDC) to evaluate ethanol levels in kombucha beverages.

- **Student Innovation Challenge 2019**

  The 2019 Student Innovation Challenge had the most exciting and diverse student submissions with representation from all six BCIT Schools and 15 program areas.

- **BCIT is helping to revitalize BC with regional food hubs**

  The BCIT Natural Health and Food Products Research Group (NRG) is partnering with Good to Grow, to create a regional Food Innovation Hub to support the growth and success of local food processors.

- **This BCIT team is building a cleaner future for northern communities**

  The BCIT Smart Microgrid Applied Research Team (SMART) has partnered with the Denesoline Corporation Limited to develop an efficient remote community renewable energy platform in Lutsel K'e, NWT.

- **BCIT researchers help aging dogs regain mobility with dog wheelchair**

  Anne-Marie Fleming, Founder and Owner of Dog Quality asked MAKE+ researchers to help design a dog wheelchair prototype for aging dogs to regain mobility.

- **BCIT Researchers have received Official Method of Analysis status for cannabinoids in cannabis**

  The AOAC ™ has officially approved the method of analysis for cannabis published by Dr. Paula Brown, BCIT Canada Research Chair in Phytoanalytics and Director of Natural Health and Food Products Research Group (NRG).

- **IoT@BCIT brings together industry giants**

  The BCIT Applied Research Liaison Office brought together the industry giants of the IoT world: Microsoft, Amazon, Huawei, TELUS, Sierra Wireless to name a few.

- **Life changing device made possible by MAKE+**

  Life changing device made possible by MAKE+ — a self-administered medical device that controls bladder leakage in men was redeveloped into a functional clinically ready prototype.