

STATE BOARD OF COMMUNITY COLLEGES
Allocation for BioNetwork Host Colleges
FY 2018-19

Request: The State Board is asked to approve \$4,077,011 to be allocated to the BioNetwork host colleges from July 1, 2018 through June 30, 2019. This amount represents the current operational funds for salaries, equipment, and other costs for the FY 2018-19.

Strategic Plan Reference:

Theme: Economic and Workforce Impact

Goal #3: Ensure the educational pipeline prepares a workforce possessing the interest, knowledge, skills, and abilities to meet the needs of employers, now and into the future.

- Objective 3.2: Offer relevant, high-quality instructional programs that meet the needs of business and industry for existing and future jobs.

Background: The NC Community College System (NCCCS) has been vital in supporting the NC economy through training and education programs that have consistently produced a steady stream of qualified workers and high-quality training for new processes and technologies. As the manufacturing base of the State shifted from traditional to high-technology, skill-intensive biomanufacturing in the 1980s and 1990s, the NCCCS was at the forefront in supporting the rising preeminence of the bioscience industry with the establishment of BioNetwork in 2004. Originally funded through a Golden LEAF Foundation grant, BioNetwork was funded on a recurring basis by the NC Legislature in FY 2005-06.

The bioscience sector has flourished in NC through the help of BioNetwork. North Carolina is the 3rd largest biotechnology cluster in the country, behind only California and Massachusetts, with greater than 650 life science companies. North Carolina's 23.5% job growth in bioscience since 2001 is the highest among the ten largest bioscience employer states, with a 6.6 percent job growth from 2012 to 2014. The total economic impact of the state's life science industry exceeded \$86 billion in 2016, rising an impressive 34 percent during the current economic expansion. (Colliers International 2017 & TEconomy 2016)

BioNetwork has supported this growth through the provision of industry relevant, hands-on training at the industry-site and in strategically located BioNetwork laboratories, including:

- (1) **Food, Beverage and Natural Products Lab** facility hosted by Asheville-Buncombe Technical Community College (A-B Tech);
- (2) **Biomanufacturing Lab** facility, which includes an aseptic training center, a validation academy, and a microbiology laboratory hosted by Wake Technical Community College (WTCC);
- (3) **STEM Engagement and Outreach Services** extends training and education for the bioscience workforce by conducting training and education workshops for students and teachers in K12 and community colleges and is hosted by Pitt Community College (PCC);
- (4) **Instructional Design and Development**, hosted by Gaston College, provides development of virtual, interactive learning modules, 3-D simulations of actual industry training scenarios, and videos that support BioNetwork training services and NCCCS college programs.

BioNetwork serves as the bioscience training component of Customized Training and its services extend to all 58 community colleges. The recommended allocations will be used to fund personnel, equipment, and operating expenses at the host colleges to ensure the responsive, qualified, and relevant service to North Carolina's growing bioscience workforce needs.

Method of Allocation: The recommended allocations are based on input from the BioNetwork Leadership Team, evaluation of the prior year's metrics, and industry growth projections derived from engagement with workforce development stakeholders. The proposed funding will enable the host colleges to meet their education and training needs for the FY 2018-19. The Vice President of Economic Development, in consultation with the Executive Director of BioNetwork, reserves the right to recall unused funding for reallocation to other BioNetwork host colleges as needed.

Recommended Host College Budget Allocations:

Asheville-Buncombe Technical Community College: \$907,221

Focus Area: Industry Training - Food, Beverage, and Natural Products

The BioNetwork staff in the Food, Beverage, and Natural Products industry sector provides relevant onsite and industry-site training and education through Customized Training, the Small Business Center Network and Continuing Education. The Natural Products Laboratory has become a national center for natural products innovation where researchers and entrepreneurs can find start-up information, educational programs, support coordination, mentoring, and referrals to launch their enterprise. BioNetwork also operates a Food Laboratory for quality testing of food products.

Gaston College: \$957,174

Focus Area: Instructional Design and Development

The BioNetwork team hosted by Gaston College creates videos; interactive, electronic modules; and virtual learning objects that are utilized by the NC Community Colleges. The virtual media products are created in partnership with companies and consist of 3-D simulations of industrial processes, environments, and equipment; educational modules that incorporate video demonstrations, interactive simulations, and assessment tools; and virtual learning tools. In addition, the BioNetwork staff at Gaston College maintains the web presence for BioNetwork.

Pitt Community College: \$762,826

Focus Area: STEM Engagement and Outreach

This team focuses on developing and coordinating statewide STEM engagement and outreach activities. Educational engagement includes training community college faculty to understand and incorporate learning tools to advance the knowledge and skills of their students. This

training helps students to successfully enter into the biotechnology and life science workforce. In addition, these training activities help K-12 and community college students connect educational pathways to career goals, and presenting workshops/seminars help educators and students understand the benefits and variety of careers in the life science sector.

Wake Technical Community College: \$1,449,790

Focus Area: Industry Training - Biomanufacturing

The BioNetwork Capstone Center, located on NCSU's Centennial Campus as part of the Biomanufacturing Training and Education Center (BTEC), focuses on offering hands-on, short course training in biomanufacturing and pharmaceutical operations to incumbent workers, new hires, and community college students in a simulated cGMP (current Good Manufacturing Practice) facility. The activities of the Capstone Center include providing biomanufacturing training through Customized Training and providing continuing education short courses, workshops, and seminars to industry, educators and NC Community College students.

Fund Source and Allocation Period: Funding is available from the FY 2018-2019 General Fund Appropriation for BioNetwork. The allocation period is July 1, 2018 through June 30, 2019.

Contact Person:

Maureen Little

Vice President for Economic Development

Brent Harpham

Executive Director for BioNetwork and Life Sciences