

STATE BOARD OF COMMUNITY COLLEGES
Allocation for BioNetwork Host Colleges
FY 2017-18

Request: The State Board is asked to approve \$4,126,936 to be allocated to the BioNetwork host colleges from July 1, 2017 through June 30, 2018. This amount represents the current operational funds for salaries, equipment, and other costs for FY 2017-18.

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. In 2014, Battelle, the world's largest independent, non-profit research and development organization, released a report for the North Carolina Biotechnology Center revealing that North Carolina experienced a 30.9% increase since 2000 in bioscience jobs, which is significantly higher than the 1% growth in the North Carolina private sector, equating to \$73 billion in annual economic activity. Please see:

http://www.ncbiotech.org/sites/default/files/pages/2014%20Battelle%20Report_Full.pdf

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 Laboratory** facility hosted by Asheville-Buncombe Technical Community College (A-B Tech);
- (2) **Biomanufacturing Laboratory** facility, which includes an aseptic training center, a validation academy, and a microbiology laboratory hosted by Wake Technical Community College (WTCC);
- (3) **Engagement 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) **Instruction Support**, 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 responsive, qualified, and relevant service to North Carolina's growing bioscience workforce needs. Even though the BioNetwork staff are employees of the host colleges, these positions function as statewide resources for training and education in the biosciences. BioNetwork staff may not be utilized for instruction generating budget Full-Time Equivalent (FTE).

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 FY 2017-18. 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. Colleges may not transfer or use funds provided through this allocation for any other purpose. Colleges may not use any of these funds to meet their management flexibility reduction or for any reversion (if required) unless specifically directed by the North Carolina Community College System Office.

Recommended Host College Budget Allocations:

Asheville-Buncombe Technical Community College: \$925,190

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 in addition to continuing education short courses. The Food, Beverage, and 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 and the Southeast's first Biofuels Laboratory offering analytical quality testing on finished biodiesel. A-B Tech's BioNetwork staff also assists the NCCCS Small Business Center Network (SBCN) and offers a variety of seminars and workshops on biotechnology and life science topics for industry, educators, and NCCCS students.

Forsyth Technical Community College: \$50,000

After two years of little training activity with the Analytical Laboratory at Forsyth Tech through BioNetwork, leadership from the NCCCS and the College met in January 2017. A decision was made to move the Lab from under the direction of BioNetwork to the College. The \$50,000 request is for FY 2017-2018 only and will support the annual maintenance fees for existing equipment.

Gaston College: \$865,000

Focus Area: Instructional Support

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: \$720,000

Focus Area: Education and Industry Engagement, Biomanufacturing Industry Training

The activities at PCC focus on developing and coordinating statewide education and industry engagement activities. Educational engagement includes training community college faculty to understand and incorporate learning tools within their curriculum to advance the knowledge and skills of their students for successful entry into the biotechnology and life science workforce, developing and delivering presentations that help K-12 and community college students connect educational pathways to career goals, and presenting workshops and seminars to help educators and students understand the benefits and the variety of careers in the life science sector. The staff also provide biomanufacturing industry training.

Wake Technical Community College: \$1,566,746

Focus Area: Industry Training - Biomanufacturing

The BioNetwork Capstone Center, located on NC State University'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 2017-18 State General Fund appropriations for BioNetwork. The allocation time period is July 1, 2017 through June 30, 2018.

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