

NORTH CAROLINA'S EASTERN REGION

Abundant BioAssets

“In terms of the life sciences industry, we have the largest concentration of pharmaceutical-related manufacturing,” said John Chaffee, president and CEO of North Carolina’s Eastern Region Development Commission (NCER). “Some of it is pilot scale, very early stage, and other components of it are very far downstream processing in terms of fill-finish activity.”

That concentration includes Merck & Co., Inc., Hospira, Purdue Pharmaceuticals, DSM Pharmaceuticals, Metrics and Microbac (formerly Southern Testing Laboratories). Medical technologies company BD has a \$100 million syringe filling operation under construction in Wilson. Proximity to Raleigh and Durham, home of the Research Triangle Park and RDU International Airport, is advantageous for NCER and its BioEast Alliance, a collaborative effort of Edgecombe, Nash, Pitt, Wayne and Wilson counties to support and grow the biotech and life sciences industry.

A skilled and ready workforce is another of the region’s major bioassets. The region’s network of 14 community colleges cooperate to provide two-year biotechnology degrees. Articulation agreements allow credits to transfer from the community colleges toward four-year degrees in biology, biochemistry and industrial technology at East Carolina University (ECU). The BioProcessing Center, one of seven centers of the N.C. Community Colleges’ BioNetwork pharmaceutical and biotechnology training, is located in Greenville. ECU is the first university in the state to offer a Master of Science degree in biotechnology.

“Another component of our bio-based growth,” said Wanda Yuhas, executive director of the Pitt County Development Commission, “is that East Carolina University is generating more new companies based on university research. We have a nucleus of biomedical projects that has evolved from many different university departments.”

Yuhas references two tenants in the Technology Enterprise Center of Eastern North Carolina, a technology-based business incubator. Pioneer Surgical Orthobiologics houses research and pilot production for E-Matrix™, a sterile, injectable, biopolymer designed to repair or regenerate diseased or damaged tissue. A member of Hemocellular Therapeutics, a collaboration between researchers at ECU and the University of North Carolina at Chapel Hill to produce the first platelet-based therapeutic blood product available for the immediate treatment of

bleeding, is establishing a development and manufacturing operation for veterinary applications working with Animal Blood Resources International.

Marine resources are being harnessed by the Duke University Marine Laboratory, University of North Carolina Institute of Marine Sciences, the N.C. State University Center for Marine Sciences and Technology, the National Oceanic and Atmospheric Administration (NOAA) and the N.C. Division of Marine Fisheries.

Tom Stewart, president of Mercury Sciences, Inc., a Raleigh-based developer of custom assays, partnered with the NOAA laboratory to produce a new immunoassay to test for the presence of Domoic Acid in shellfish. Mercury Science’s Domoic Acid Test Kit tests up to 36 samples and can be done in-house for \$8 per sample, an improvement over older assays that require shipment to an outside laboratory and cost up to \$100 per sample.

“The NOAA lab was aware of the need for a faster way to test shellfish for toxins and looking for new technology development,” said Stewart. “Mercury Science and NOAA labs combined strengths to get a product that benefits the general public from initial stage to market launch in less than two years.”

According to Yuhas, the key to businesses’ attraction to the NCER is the abundance of bioassets from the labor force to the facilities to the support services that are available for every kind of bio-based company. ①

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