

# ENTREPRENEURS IN THE MARKETPLACE

**With natural products emerging** in North Carolina as a new industry sector, entrepreneurs like Randy Beavers, owner of OrganiPharm, LLC, are making a move to the state. Beavers is getting the assistance he needs to grow his business from the BioBusiness Center on the Enka Campus of Asheville-Buncombe Technical Community College (A-B Tech).

"North Carolina has made natural product development a focus," Beavers said. "Companies in the region of my type are being drawn to that plus the growing conditions are better."

## GOLDENSEAL EXPERT

On their 40-acre, family farm, Beavers and his wife Cindi own OrganiPharm and grow *Hydrastis Canadensis* or goldenseal, a plant valued for its antimicrobial properties. From goldenseal, they manufacture liquid dietary supplements. Goldenseal is on the endangered species list due to over harvesting in the wild. Beavers developed a domesticated form of the plant that small farmers and land owners can grow. They have 23 growers in the Southeast and are a 100-percent, grower-owned company.

OrganiPharm and their growers are certified under the USDA's National Organic Program that develops, implements and administers national production, handling and labeling standards for organic agricultural products. Beavers is recognized nationally as a goldenseal expert. Small Business Innovation Grants from the National Institutes of Health supported research and development of his growing methods and products. His current grant is for the development of a research grade product that the NIH can use for clinical studies to produce standards for goldenseal products, which are commonly sold in health food stores and pharmacies across the country.

OrganiPharm, LLC is working with the BioBusiness Center on developing current good manufacturing practices (cGMP) to meet FDA regulations that will be in effect in 2010 for the standardized production of dietary supplements.

"The standard operating procedures that follow FDA recommended manufacturing processes is a manual two to three inches thick that is extremely detailed. It's a document most small businesses cannot produce themselves," Beavers said.

Jon Lawrie, manager of the BioNetwork's BioBusiness Center, works frequently with company owners on manufacturing processes. "They have knowledge of the herbs. What they don't know is manufacturing," he said. "We take pharmaceutical manufacturing methods and apply them to medicinal herbs to raise the quality and consistency of their products and that allows them to compete more effectively on a regional and statewide basis."

By taking advantage of the Blue Ridge Food Ventures facility, a USDA certified food preparation kitchen, available at A-B Tech's Enka Campus Technology Commercialization Center, a small business incubator, Beavers' business is expanding from Dalton, GA into North Carolina. In the winter, Beavers plans to process part of his fall harvest for production at the facility. He is also working with the micropropagation program at Haywood Community College in Clyde, NC to develop higher-value goldenseal cultivars to increase growing potential of the plant.


## ALGAEPRENEUR

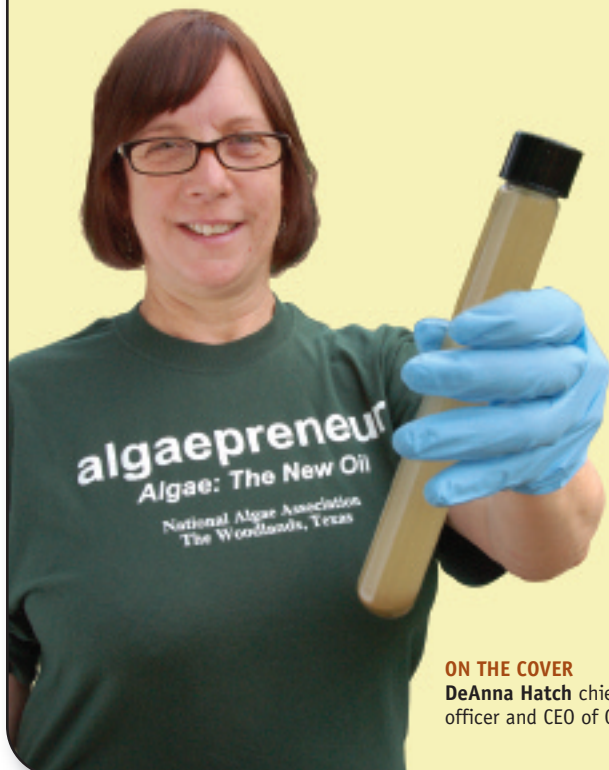
A self-proclaimed algaepreneur, DeAnna Hatch, chief scientific officer and CEO of OrganoFuels, combined BioBusiness Center assistance with an angel investor and an \$80,000 grant from the North Carolina Green Fund to start her company that is developing the chemistry and process to manufacture gasoline from the oils algae produces.

"It was four in the morning one day, and I was mad at the price of gas. My background is in natural product chemistry," Hatch said. "So I thought, 'why can't you make gasoline out of a plant?' The chemistry seemed like it wasn't that difficult. I hadn't thought of algae at that time." Hatch has a Ph.D. in pharmacognosy, the study of chemistry within plants, animals or microbes.

The BioBusiness Center's role in her company is substantial. She credits Lawrie and Curriculum Coordinator Paul Knott with helping develop business plans and reviewing documents from business and technical viewpoints. "They've been helpful in terms of networking and helping find community colleges that can help me get my work done at a college cost instead of industry cost," she said.

Located in A-B Tech's Technology Commercialization Center, Hatch enjoys the benefits of office space and lab access, both for "reasonable amounts of money." The incubator gives her the support of other entrepreneurs and a host of pro bono business services. "The natural products lab has everything I need for my business," Hatch said. "I can use a \$100,000 piece of equipment that will take me years to afford for an hourly rate. Sarah (BioNetwork technical specialist with the BioBusiness Center) helps me with ordering equipment and is helpful with setting up methods to use."

Hatch estimates that she is about a year from proof of concept, which will lead directly to licensing and production. 



### ON THE COVER

**DeAnna Hatch** chief scientific officer and CEO of OrganoFuels



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[www.organipharm.com](http://www.organipharm.com) or [www.abtech.edu](http://www.abtech.edu).