UMMC biotech park to boost economy

A 25-acre research park planned to be built on the site of the old Farmer’s Market in Jackson will pump tens of millions of dollars into the state’s economy and employ up to 1,500.

Construction on the first building at the University of Mississippi Medical Center’s Biotechnology Research Park could begin as soon as January 2011. The park will include state-of-the-art lab and business incubator space.

In the coming months, Dzielak said UMMC leadership hopes to enroll other entities for the project, including the City of Jackson and the Mississippi Development Authority.

“Don’t dig in your heels and local agencies as we can. We want to get buy-in to make this as successful because, really, what we’re creating is a tremendous economic-development opportunity for the city,” he said.

“The public-private environment offers the most attractive situation for technology innovation that you could possibly design,” said Dr. H. Randall Goldsmith, president and CEO of the Mississippi Technology Alliance.

The alliance, a non-profit economic development organization, fosters growth of start-up technology business, connects promising companies with investor capital, and streamlines workforce education and helps existing industries modernize.

For more information on UMMC and the research park, visit http://publicaffairs.umc.edu/center_view/101209/research_park.html.

Jet project up next at State’s CAVS


A team at Mississippi State University’s Center for Advanced Vehicular Systems (CAVS) is working now with the Department of Defense to better predict failure in jet airplanes.

Students recently wrapped up another project: crafting a bearing cap for Ford engines that is 10 percent lighter and 25 percent stronger than many of its kind in use today.

The next frontier may be developing Mississippis’s nuclear industry.

Using multi-scale materials, the CAVS Computational Manufacturing and Design division is transforming the manufacturing business and helping place students who come through the program in high-paying, and oftentimes, Mississippi-based jobs.

“Because of the work here at Mississippi State, manufacturing is based less on trial and error and more on a simulation methodology,” said Dr. Mark Horstemeyer, CAVS Chair of Computational Solid Mechanics and Professor of Mechanical Engineering. “In other words, you can design things correctly the first time, which makes them less expensive and more accurate.”

“Since Dr. Horstemeyer joined CAVS in 2002, the number of graduate students in the mechanical engineering has grown from a few to 75. Many of these students, and others from a variety of other disciplines, come through the center to build their portfolios and work side-by-side with engineers and analysts from some of the world’s foremost companies to optimize the design of almost any imaginable part or product.”

“The research our students and faculty are conducting directly impacts our state economy and the day-to-day lives of Missis- sippians,” Dr. King said. “Dr. Horstemeyer’s research demonstrates that well in the prod- ucts that they have improved and continue to improve through their innovative work.”

For more information on Mississippi State University’s CAVS, visit http://www.cavs.msstate.edu/.

ASU field day helps farmers

Mississippi farmers looking for ways to protect and grow their businesses in an uncertain economy are receiving free help through a program at Alcorn State University.

The university offers an annual field day for farmers that is growing in popularity. More than 200 farmers attended this year’s event.

Farmers learn the results of the university’s latest research, and they receive training oppor- tunities that offer a hands-on approach.

“They can come and see what we are doing so they can do it on their own back- yard,” said Dr. Girish Panicker, Director of Conservation Research at Alcorn State University.

Farmers can receive training on fruit, veg- etable, swine and goat production. Highly experienced scientists from the fields of fruit and vegetable production and swine and goat husbandry attend the field day to assist in training programs.

In addition, farmers can learn about pro-
In January, 10 laboratories, a pilot production facility and the only National Formulation Science Laboratory for polymer science will open under one roof in the University of Southern Mississippi’s new research park. The Garden.

Much of the space, known as “The Accelerator,” will be available to private, small and early-stage businesses that have an interest in ground-breaking research, as well as the practical application and commercialization of their discoveries. The renowned Mississippi Polymer Institute at USM will occupy one-third of the building.

U.S. Department of Commerce is embarking on a major “Made in America” initiative to help give students practical experience in energy conservation and renewable energy. In just four short years, enrollment in classes at Delta State University’s Center for Interdisciplinary Studies (GIS) has climbed from about 20 students to more than 170 this semester alone.

Among those who have graduated with a minor or concentration in Geographic Information Science (GIS) is a nearly 100 percent job placement rate.

Everyone who wants a job in the field has one – and many of them have stayed in Mississippi,” Center Director Talbot Brooks said. The high percentage is the result of one key ingredient, Brooks said. Students who come through the center leave with a portfolio of real world experience gained through grants and contracts that support cooperative educational and student internship opportunities with businesses, organizations and governmental agencies. The arrangement helps keep the center self-sustaining and provides students with hands-on experience.

Delta State does not yet offer a bachelor’s or master’s degree in GIS, so students come from a range of disciplines on campus, Brooks said. Andrew Steele, 26, graduated from Delta State in 2007 with a bachelor’s degree in Business Administration and a minor in GIS. Now he’s working with Northrop Grumman to correct satellite imagery for a defense contract. “Employers are always looking for experience in geospatial technology,” Steele said. “That’s been the most beneficial thing.”

For more information on the Center for Interdisciplinary Studies, call the Geographic Information Technology Center at 601-862-3038.

WHAT IS IT?
Geographic Information Systems (GIS) is the capture, storage, processing, analysis and visualization of information on a spatial (location) basis.

The rocky economy is prompting some Mississippians to consider ways to start businesses that can improve their own businesses, and they’re receiving help from a free program offered at Mississippi University for Women. The Women’s Center for Entrepreneurship offers hands-on assistance for residents trying to launch small businesses or promote existing ones. The program focuses on businesses that employ 5 people or fewer, and it’s estimated that the university will be able to take ownership in January 2011.

“A lot of great ideas are coming out of the university. The challenge is to move these ideas into the marketplace,” said Dr. Les Goff, President and CEO of Noxubee Technologies Inc., the principle technology marketing and commercialization arm of the university’s research foundation. “The Accelerator adds the capability to scale the technologies for customer sampling and feedback. This process always provides a big help to Mississippi.

“There are very good people who are interested in the students graduating from Mississippi, and it’s now estimated that the university will be able to take ownership in January 2011.

“We have space for 24 students, but we will probably accept between 10 and 15 for fall 2010,” Dr. Manzou said. In October, Entergy and the Entergy Charitable Foundation gave $400,000 to JSU’s College of Science, Engineering and Technology that will go toward establishing the lab. The company also gave $100,000 to provide scholarships for Jackson State engineering students who choose to specialize in power systems engineering.

Modeled after a similar program at the University of Minnesota, the JSU Power Systems Laboratory will enable students to conduct experiments in power simulations, power electronics, electrical machines and other subjects related to managing and modernizing the nation’s energy transmission systems. Students will also learn about energy efficiency and sustainable energy.

Entergy will also offer a summer internship to help give students practical experience in engineering. Dr. Robert Whalin, Associate Dean of the School of Engineering at Mississippi University for Women, is helping to develop the Center.

Dr. Marion Wesley, Interim Director of the Center for Entrepreneurship and Commercialization, said Dr. James Vaughan, CME’s Interim Director. Finding funding to help start others businesses is just not done.”

Besides offering students degrees in engineering with an emphasis in manufacturing, the CME will also offer cross-disciplinary studies such as business, management, accounting, leadership and human resources. These skills will give graduates a competitive advantage over others looking for jobs in the manufacturing industry.

“Students who come through this program will be able to come into a company and help that company improve the manufactur- ing efficiency of that operation,” said Dr. James Vaughan, CME’s Interim Director. “I think would companies would be quite interested in the students graduating from this year,” he said.

UM advances new program
One former student is working on a defense project contracted out to Northrop Grumman.

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