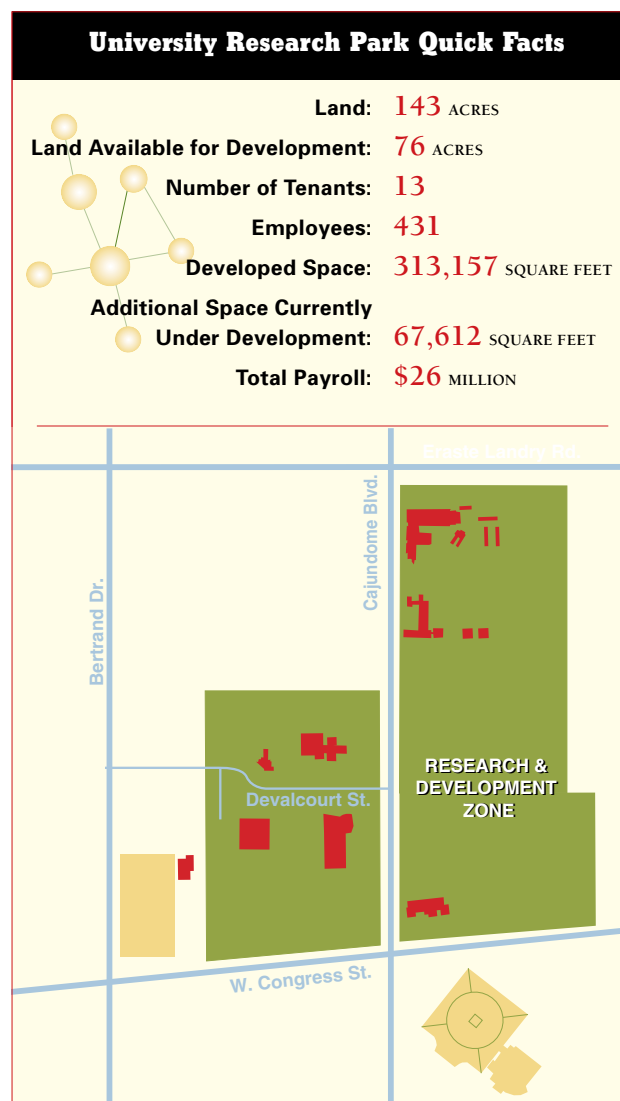


## Bold Investment

University Research Park continues to flourish

**I**N THE LATE 1980s, MOTORISTS DRIVING along Congress Street near Cajun Field saw horses and sheep grazing on property owned by the University of Southwestern Louisiana.

When USL President Dr. Ray Authement looked at the same land, he saw the future. In his mind's eye, the farm animals and barns were replaced by research facili-



ties that would boost the local economy while helping the university (now known as UL Lafayette) elevate its stature as a research institution.

By 1990, the livestock had been relocated to the university's farm in Cade, La. Thanks to some influential friends in Washington, D.C., the first tenant in the 143-acre University Research Park – the National Wetlands Research Center – opened for business in 1992.

Today, the NWRC has lots of company. Its neighbors include:

- the Lafayette Primary Care Facility;
- the Estuarine Habitats Coastal Fisheries Research Center;
- Abdalla Hall;
- the Lafayette Economic Development Authority;
- the Louisiana Immersive Technologies Enterprise; and
- Hilton Garden Inn.

Construction of the Cecil J. Picard Center for Child Development is expected to begin soon. Until then, LITE is the newest kid on the block.

With LITE's debut in 2006, UL Lafayette stepped onto the world stage as a leader of technology and innovation. Researchers at LITE use a supercomputer, nicknamed "Zeke," to quickly convert huge amounts of data into 3-D graphical models. Wearing special headgear, they can then immerse themselves in those models. Connections to fiber optic networks enable them to work on projects with collaborators around the globe.

The State of Louisiana, LEDA and UL Lafayette formed a partnership to fund the \$27 million LITE project for the same reason Authement created University Research Park – economic development.

Authement had seen for himself that research can be a powerful economic tool.

His introduction to that concept occurred in 1961, when he spent a year as

a visiting professor at the University of North Carolina at Chapel Hill. UNC, North Carolina State University and Duke University had already formed Research Triangle Park, which would become one of the most successful university research parks in the United States.

South Louisiana would later experience an outrageously prosperous Oil Boom. By the late 1970s, Lafayette had become the "Hub City" for oil companies, large and small. The price of a barrel of crude oil rose from \$14 in 1978 to \$35 a barrel in 1981. A headline in the *New York Times* in 1981 trumpeted: "Lafayette, La.: Home of a Thousand Millionaires."

But just a couple of years later, the price of oil plummeted, taking with it the oil-dependent economies of Lafayette and Louisiana. So much focus had been placed on the oil industry that other sectors of the economy had been neglected.

When state oil revenues dwindled, Authement was forced to reduce the university's budget. From 1982 to 1988, USL endured eight budget cuts that totaled about \$10 million. There were more reductions ahead.

In the mid-1980s, USL decided to become proactive. "We set a goal to help, to create companies and bring jobs," Authement stated in an article published in the May 1, 2002, issue of *The Times of Acadiana*. Ultimately, he created 17 research centers to help reach that goal.

USL needed to entice an "anchor" tenant in University Research Park, just like a commercial developer needs an "anchor" store for a new shopping mall. One of the first prospects was the National Wetlands Research Center in Slidell, La., which was interested in relocating to a site closer to environmental biology researchers. According to a 2003 news release, NWRC scientists "were the first group to document the extent of wetland loss in Louisiana between the 1950s and 1970s."

Authement had positioned USL perfectly about 15 years earlier by strengthening its Biology Department. One way he accomplished that was by reducing faculty members' teaching loads so they could conduct more research. It was a move that paid off in a big way.

"In 1990, a national team of biologists visited the state's biology departments and chose USLs as the most outstanding, sparking a special citation to the department from the state Board of Regents," stated Dr. Dar-

ryl Felder, head of the Biology Department, in an article published in the Summer 1992 issue of *La Louisiane* magazine.

So University Research Park was a viable option for the NWRC. But other universities across the country were courting that agency, too. So, Authement called for some federal firepower.

"We needed two things: first, funding, and second, the cooperation of the U.S. Fish and Wildlife Service. Sen. Bennett Johnston secured the funding by virtue of his place on the Interior Appropriations Subcommittee. Equally important, Sen. (John) Breaux won over the Fish and Wildlife Service, by virtue of the great respect he commands in the Capitol on environmental issues," Authement said in 1988.

Louisiana's Congressional delegation was probably at the peak of its power, due in part, to its seniority. For the next few years, it continued to help send federal projects and funding to USL.

- In 1996, Johnston delivered a \$10 million EETAP grant, which was the biggest research grant in the school's history.

- USL was named one of only four NASA Regional Application Centers in the United States the same year.

- The federal Estuarine Habitats Coastal Fisheries Research Center opened in University Research Park in 1998. It's owned by the National Oceanic Atmospheric Administration. ■

## Research Park Tenants At A Glance

### USGS NATIONAL WETLANDS RESEARCH CENTER

Biological research is conducted here to help protect, restore and manage natural resources, especially fish, wildlife and wetlands in the South.

### LAFAYETTE PRIMARY CARE FACILITY

This is used to train medical residents in family practice. It represents a cooperative effort by Lafayette General Medical Center, Our Lady of Lourdes Regional Medical Center, LSU Medical Center, University Medical Center and UL Lafayette.

### ESTUARINE HABITATS COASTAL FISHERIES RESEARCH CENTER

Owned by the National Oceanic Atmospheric Administration, the center houses offices and labs for agencies such as the National Marine Fisheries Service and U.S. Army Corps of Engineers.

### ABDALLA HALL

Occupants of this university-owned building include the Center for Business and Information Technologies and the Energy Institute.

### LAFAYETTE ECONOMIC DEVELOPMENT AUTHORITY

Its mission is to contribute to economic growth in Lafayette Parish. It does that in many ways, such as by helping local companies develop markets and by recruiting business and industry.

### LOUISIANA IMMERSIVE TECHNOLOGIES ENTERPRISE

Its three-story, egg-shaped glass enclosure reflects the advanced technology inside. LITE gives university researchers and private industry access to supercomputers that can convert massive amounts of data into graphical images. Using special equipment, researchers can then immerse themselves in those images.

### HILTON GARDEN INN

This 155-room hotel is also an educational resource for UL Lafayette students who are majoring in hospitality management. It includes classrooms and faculty offices.

### CECIL J. PICARD CENTER FOR CHILD DEVELOPMENT

Construction is expected to begin in early 2008. The Center is a multi-disciplinary group of evaluation and research professionals that focus on early childhood, K-12 education and lifelong learning. Applied research is continually conducted in all areas of child education, health and well-being.

## Rising Star

Math, Computer Science Departments rank among nation's elite

**I**N OCTOBER, THE NATIONAL SCIENCE FOUNDATION announced that the University of Louisiana at Lafayette has one of the top 100 mathematics departments in the country.

UL Lafayette's Computer Science Department is among the top 60 university computer science departments in the country, according to the NSF.

The latest rankings are based on the amount of external funding the departments received in 2004.

Dr. Ray Authement, president of UL Lafayette, has stressed research during his 33-year presidency. UL Lafayette's computer science program has long been recognized for its innovation because of the attention he focused on it as president.

Having a math department that's among the top 2 percent in the nation is another indication that UL Lafayette's stature as a research university is growing, said Dr. Bradd Clark, dean of UL Lafayette's College of Sciences.

It also reflects the breadth of research conducted at the University of Louisiana at Lafayette. That scope was acknowledged in 2006 when the Carnegie Foundation designated it as a "Research University with High Research Activity." Universities in that category includes Clemson, Auburn and Baylor universities. The only other Louisiana institution in the same category is the University of New Orleans.

"One or two departments will not get you that designation by the Carnegie Foundation," Clark said. "You have to have breadth."

The high rankings for UL Lafayette's Mathematics Department and Computer Science Department are significant for another reason: a growing cross-discipline approach to research.

At UL Lafayette, for instance, mathematical modeling is being used to

make projections related to biological issues and health issues.

Dr. Azmy Ackleh, a professor of applied mathematics, has attracted about \$2 million in research funding from agencies such as the NSF and National Institutes of Health. He is especially interested in using mathematical modeling to predict population trends.

For instance, he and Dr. Jacoby Carter, an ecologist at the USGS National Wetlands Research Center, developed

a computer model that enables them to predict nutria population dynamics and movement patterns.

Ackleh and some colleagues at other schools are also working on a project that uses mathematical modeling to test policies related to alcohol consumption by college students. Their efforts could someday be used to help curb binge drinking by college students across the nation.

Ackleh has received NSF funding to establish a mathematical-biology option for undergraduates.

Computers are central to such collaboration. "We're building a generation of scientists that is accustomed to using the computer as a tool. Math is a language of science; a good mathematician is a translator. A mathematician can translate biological questions into formulas that can then be looked at by a computer. The computer is being used, through the modeling lens, as a tool," Clark said.

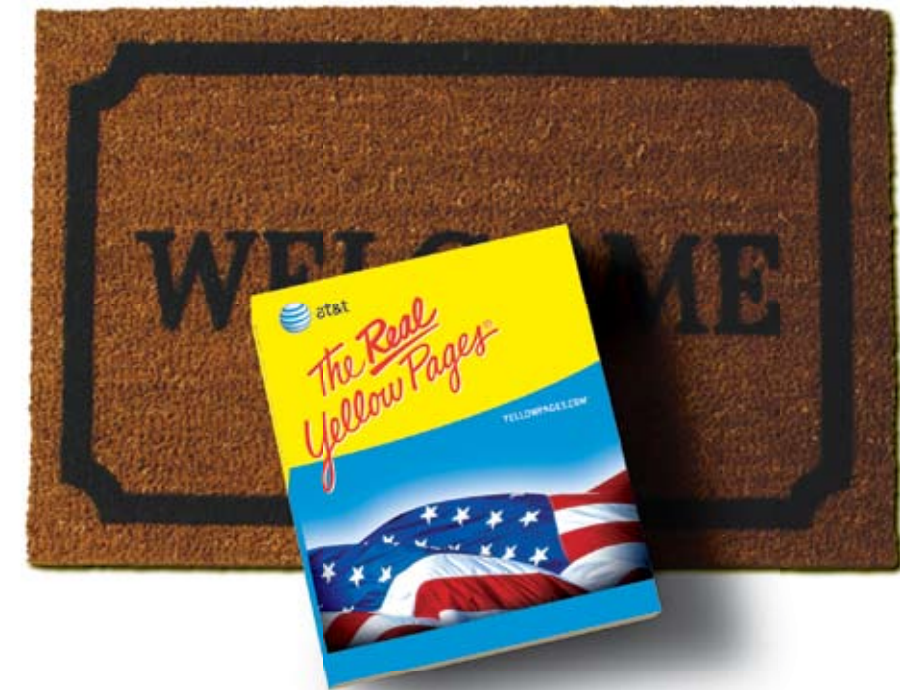
UL Lafayette has the expertise and computer power needed for complex projects. Its Center for Advanced Computer Studies, for instance, is a leader in grid computing.

UL Lafayette's Louisiana Immersive Technologies Center has a supercomputer that's connected to the Louisiana Optical Network Initiative. LONI is a state-of-the-art fiber optics network that links research universities in Louisiana. LONI is also part of the National Lambda Rail, which connects universities across the United States.

"As UL Lafayette gets involved in more and more complex questions, the need for more and more power is available. So we have the ability to work with data sets that are huge. That capability is allowing us to bring in strong young researchers. They become excited about the possibilities," Clark said. ■

### Current Research Centers

Cecil J. Picard Center for Child Development  
Center for Advanced Computer Studies  
Center for Analysis of Spatial and Temporal Systems  
Center for Business and Information Technology  
Center for Ecology and Environmental Technology  
Center for Gifted Education  
Center for innovative Learning and Assessment Technologies  
Center for Louisiana Inland Water Studies  
Center for Louisiana Studies  
Center for Structural and Functional Materials  
Center for Telecommunication Studies  
Cognitive Evolution Group  
Corrosion Research Center  
Doris B. Hawthorne Center  
Energy Institute  
Health Informatics Center of Acadiana  
Institute of Cognitive Science  
Ira Nelson Horticulture Center  
Louisiana Accelerator Center  
Louisiana Immersive Technologies Enterprise  
Microscopy Center  
NOAA National Marine Fisheries Service  
Regional Application Center  
X-Ray Center



## Coming to doorsteps everywhere

This year's edition of the most referenced directory in the Southeast<sup>1</sup> is now delivering in Lafayette. Page for page, AT&T Real Yellow Pages has better information than any other directory. Look for it on your doorstep soon. **The new AT&T.** Your world. Delivered.