



beyond the ivory tower: higher education & economic development

article by
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“EVERYTHING A UNIVERSITY DOES IS ECONOMIC DEVELOPMENT,” SAYS DR. Andrew Brod, economist and director of UNCG’s Bryan School’s Office of Business and Economic Research (OBER). Brod’s recent analysis of the university’s economic impact—\$1.22 billion annually and more than 13,000 jobs—is measurable, concrete evidence of what people have known for quite a while: There is no ivory tower where students and professors stay tucked away, engaged in intellectual pursuits with no relevance to the real world.

The reality is that colleges and universities have always shaped society beyond their walls. Each year, students graduate and join the ranks of the employed; working with the larger community is standard for faculty, although in more recent years, “community” has expanded to include a regional and global outreach. As a business enterprise, a university creates jobs and generates revenues while being a major purchaser of commodities.

The intrinsic value of higher education remains a core purpose of what some label a “paper key” that unlocks the world. At the roots of UNCG’s School of HES is what continues to be the three-part mission of the UNC System: teaching, research and service.

In 1946, the HES Foundation Board was founded upon those goals and a partnership between business and education. Margaret Edwards, head of the Home Economics Department of what was then Woman’s College, ventured across the state to meet with business leaders in their respective communities. “[This] positively affected public policy and the quality of North Carolinians’ lives,” remarks Dr. Laura S. Sims, dean of HES.

Current HES Foundation Board president Robin Britt, who is executive director of Guilford Child Development, Inc. in Greensboro, echoes this sentiment. During his speech at the board’s 60th anniversary gala last fall, he noted that the board’s formation “was acclaimed as a step forward in improving living conditions which would help industry along with individual citizens.” Current board members, made up of alumni and friends from the different fields representative of the five departments, continue to strengthen and support HES with their time, experience and resources and provide guidance in the stewardship of donations.

Universities and industry working together isn’t new. What *is* new, over the last 25 years and in the 21st century most especially, is the growing, deliberate and competitive pursuit of such collaborations, and what the expectations and outcomes are. In the powerful realm of economic development, perched within the larger global economy, colleges and universities are redefining their roles and responsibilities. What are some of universities’ most basic roles? Graduating educated, creative individuals; engaging in research and technology transfer; and improving the community are three important, interdependent ones.

< < *West of HES’s Mary Frances Stone Building rises downtown Greensboro’s upcoming Center Pointe. An upscale, high-rise condominium emerging from the former Wachovia footprint, it will alter the UNCG skyline.* Scott Whitaker



HDFS assistant professor Dr. Andrew J. Supple requests feedback during a "Lifespan Development in the Human Environment" class. Scott Whitaker

> > (left) UNC System President Erskine Bowles and UNCG Chancellor Patricia A. Sullivan agree that strengthening the connection between higher education and economic development is key for the region's economic strength. Scott Whitaker

> > (right) Thomas Ross Sr., newly-selected president of Davidson College and UNCG Board of Trustees' out-going president, zips across campus during dedication services for UNCG's new buildings, including IARC's new home. Area leaders were on hand for the events. Scott Whitaker



“We educate the people who start new companies, who educate our children, who care for us in the hospital, manage our companies, preach in our churches and lead our nonprofits....”

Universities Generate a Trained Workforce

“Universities produce educated people,” Brod reminds. Human capital is one of universities’ largest commodities, and part of their new responsibility is “learning how to train and educate people appropriately.... Training can be a commodity in itself.” Businesses often look not only for graduates who are knowledgeable but also creative, with an entrepreneurial spark.

Robert McDowell, Microsoft’s vice president for Information Worker Business Value, spoke about properly training graduates during his keynote address for UNCG’s inaugural Corporate Expo held last fall. McDowell stressed that universities must be more responsive and efficient in meeting industries’ needs. “Business has to be the voice of the customer,” McDowell states in *Bryan Forum*. “How can they produce what is needed if the customer, businesses, are not involved in that process? Industry has learned to do this very well and could teach universities how to be more effective, more efficient and more responsive in designing and redesigning relevant curricula.”

This approach is already firmly in place within HES’s departments through advisory boards, committees and associations made up of distinguished business professionals. “You have to keep a close watch on each profession,” Britt says. “Things are changing so fast...it’s imperative that the worker being turned out of universities is positioned to perform not with [how industry was] five years ago, but now. Part of being

effective is being cognizant of changes taking place and what those changes represent.”

HES’s Consumer, Apparel, and Retail Studies (CARS) Department boasts the oldest board, established in 1984. Its 20-member board guides and influences the department’s curriculum to keep it in step with industry trends; the department’s name change away from the term “textiles” was also a result of utilizing the board’s vast depth of industry knowledge. The Nutrition (NTR), Social Work (SWK) and Human Development and Family Studies (HDFS) departments formed advisory committees in the 1990s. The Department of Interior Architecture (IARC) created its board in 2001.

The potency of higher education is magnified when individuals active within their respective industries are mentors to colleges. “We’ve seen the business world reinvent itself in the last 10 years, and we’ve seen the way government is done change quite dramatically,” says Leslie Boney III, associate vice president for UNC System’s Economic Development Research, Policy & Planning. “Universities must change too, and the question is how we change.” Boney asserts one way to change is to increase direct engagement with business.

“We need conversations with those who are hiring our graduates,” Boney continues. “We must pair what professors want students to be able to do with what businesses need employees to know.”

Libby Smith, policy director of the North Carolina Department of Commerce, agrees. “To attract good jobs, you

must have skilled workers.” She says she sees “a more thoughtful partnering” between institutions of higher learning and industry. “Sectors within education, business and government are being more strategic in working together. For instance, UNC System President Erskine Bowles and NC Community College System [NCCCS] President H. Martin Lancaster are coordinating efforts to accomplish even more together.”

Each system represents, in effect, a major corporation. The UNC System has a student enrollment of almost 200,000 students (and is expected to hit 235,000 by 2012), more than 37,000 employees (almost 11,000 faculty members) and a budget that exceeds \$6 billion. Nearly 800,000 students are enrolled in 58 community colleges across the state, making NCCCS one of the largest community college systems in the country. Its employees top 31,000 (more than 20,000 faculty), and its budget is almost \$935 million.

“President Bowles and President Lancaster knew one another and already had a good rapport from their days in politics,” says Keith Brown, NCCCS’s associate vice president of Planning, Accountability, Research & Evaluation. “Workforce development and training have always been [community colleges’] mission, and President Bowles realizes this needs to be held up as a primary role of universities.” Brown says he’s excited to see increased collaboration between two-year and four-year institutions.

From Bowles’ inauguration speech on UNCG’s campus in April 2006, he is quoted as saying, “We educate the people who start new companies, who educate our children, who care for us in the hospital, manage our companies, preach in our churches and lead our nonprofits. We are responsible for the leaders of tomorrow and there is no bigger role.”

Universities Engage in Technology Transfer

Technology transfer means transferring ideas, information, methods, techniques, tools or technology from its creator to potential users. A basic example is when a professor conducts research and the results are published, whether in academic, industry-specific or mainstream publications. Ultimately, the results may have more far-reaching consequences in the form of additional studies, public policy change, new programs, licensing of intellectual property to existing companies or lead to the formation of new entrepreneurial businesses.

UNC campuses brought over \$940 million in external grants into the state in fiscal year 2003. UNCG’s external funding for research, public service and creative work totaled \$33.4 million in fiscal year 2005–2006; external funding for HES, by way of contracts and grants, accounted for more than \$13 million—almost 40%—of that amount. Much of this research activity was directly targeted to meet economic, health and social needs within North Carolina. Per Brod’s data, UNCG’s research accounts for \$102.2 million statewide.

“The university conducts research that is directly applicable to economic development,” Brod says. “Professors consult and collaborate with businesses and sometimes work with nonprofits. Universities can research...and then find a way to make a company out of it. And it’s not always technology in the form of high-tech stuff. It could be an educational program that becomes a product.”

UNCG is already fully participating in commercializing intellectual property. Its Office of Technology Transfer, established in 2002, connects professors’ research, entrepreneurial

groups, venture capital sources and even other institutions of higher learning. Several projects have evolved into licenses sold to companies; recently, UNCG research on alcohol abuse prevention spawned the creation of a new start-up company. Director Jerry McGuire shares that university-wide, faculty, staff and students are increasingly involved in “innovation disclosure”—recording innovations that may have potential beyond initial research. “Nutrition faculty are involved in some interesting projects,” notes McGuire as one example. “Dr. Michael McIntosh is pursuing patents on some of his work...and he has some sponsored research.”

Within this same realm of intellectual capital, UNCG’s OBER performs applied research in economic policy and business practice, using the Bryan School of Business faculty’s expertise. UNCG’s Office of Research and Public/Private Sector Partnerships oversees and advances the university’s research mission, economic development and federal relations. Last fall, the UNCG Economic Development Council was created to foster partnerships between academic research and the public/private sector.

“All of HES’s departments and centers are involved in or have the potential to be engaged in economic development,” notes Dean Sims. Many HES faculty receive grants to conduct studies important to society and the economy. NTR faculty are constantly involved in gathering data to improve human health and well being; studies run the gamut from focusing on postpartum mothers, preventing childhood obesity and Dr. McIntosh’s continued work with conjugated linoleic acid (CLA) and its role in reducing fat synthesis and storage in human fat cells.

SWK faculty are impacting society via various research endeavors; one of the most recent examples is Dr. Melissa Taylor’s research on the treatment of the mentally ill within prison systems.

Dr. Nancy Nelson Hodges, an associate professor and CARS’s graduate studies director, has been researching North Carolina’s textile and apparel industries. Backed by North Carolina Agricultural Research Service Funding and USDA approved, the \$166,500 award began in 2002. Nelson Hodges will complete her findings this October. “The media paints a predominantly negative picture of the status of [textile and apparel] industries,” she states. However, the five-year study is showing a positive outlook for post-graduation employment opportunities. Nelson Hodges notes that her results so far indicate programs (including CARS) continue to meet needs of both employers and students. “There is even more potential to do so by focusing on developing graduates’ entrepreneurial and small business skills.” She says that many students have a

high level of entrepreneurial interest, expressing desire to ultimately start their own businesses.

“There’s no doubt that assets of research and development within the university have dramatic consequences on economic development,” says Britt. “The more a university is intentional to contributing to that and using resources to expand, the more impact it has.”

Starting with the youngest citizens—children—UNCG conducts critical research with far-reaching implications for families. Its Child and Family Research Network had its initial meeting mid-April to facilitate collaboration and enhance scholarship, teaching and service within an interdisciplinary community. HES faculty are involved in numerous studies in this arena.

Britt points to Dr. Deborah Cassidy’s work—and numerous multi-million dollar grants—for the HDFS department’s five-star rating system that rates child care centers throughout North Carolina’s one hundred counties. Cassidy and co-investigators Dr. Linda Hestenes, Dr. Steve Hestenes and Child Care Education Program (CCEP) Director Sharon Mims serve as coordinators. What began as funded research has evolved into an entity with huge repercussions for North Carolina’s childcare sector, and it serves as a model for

other states. “It has an impact of its own in terms of people it employs around the state.” Beyond that, Britt stresses that even more important is the effect it has by enhancing programs’ quality, environments and classrooms of young children. “Kids are prepared so they can exceed in school...and in life.” We’ll highlight some of HES’s efforts with children and child care in the next section.

Looking closer at partnering with other institutions of higher learning, UNCG and HES are actively involved in such ventures. “One of the first and most successful efforts of such partnerships for us was the establishment of the Joint Masters of Social Work program,” says HES Dean Sims. Begun in 1999 between HES’s SWK Department and NC A&T State University (NCA&TSU), the unique program pools the resources of both universities including faculty and library privileges, with classes held on both campuses; the degree is granted jointly by the institutions (diplomas even sport both seals).

In 2004 NCA&TSU and UNCG began plans for Gateway University Research Park for research, training and development to keep the region competitive. Areas of research are Nanotechnology, Biotechnology and Biochemistry, Materials Science and Engineering, Health Genetics, Food and Nutrition, Environmental Sciences, Electronics and Human Factors.

IARC recently created the Center for Innovation in Interior Architecture (CIIA), an education and research arm



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^^ Gateway University Research Park is a joint venture of UNCG and NCA&TSU that will consist of two separate research campuses—north and south. This rendering illustrates the south campus. courtesy of Gateway University Research Park

vv IARC’s Rich Goldberg (left) and RCC’s David Kenealy examine an originaive wine barrel prototype (patent pending) dubbed “DB1” that utilizes reusable staves. The project tentacles could have a broad economic reach. Scott Whitaker



of the department. Once the park is complete, CIIA will house an interior product development studio in a proposed 8,000-square-foot, state-of-the-art design facility. The CIIA program has already been building partnerships with industry and with other institutions of higher learning to establish mutually beneficial relationships to devise concepts and products that contribute to community outreach and collaboration.

Partnering IARC with Rockingham Community College’s (RCC) Fine and Creative Woodworking program, CIIA has initiated a design/build collaboration to produce both workers and prototype products for smaller, more agile manufacturers utilizing advanced manufacturing processes. Its first product was introduced in January 2006, a niche-market side chair that met rave reviews. A current ongoing project has IARC and RCC collaborating on an innovative wine barrel design. This initiative can benefit students who receive hands-on training, the communities where they live and work, and three sets of industries: those that produce the raw materials (wood), those that will manufacture the product and those that will use or sell the products, including the state’s burgeoning wine industry.

A May 2006 report of the Special Committee on Community and Economic Development adopted by the UNC Board of Governors states that addressing the “economic development needs of the state must become a central objective for the University.” Of the five “far-reaching goals” needed to achieve that objective, number one is “deliver learning that meets the needs of the 21st century economy.”

“Just like the nation, North Carolina faces economic challenges in the New Economy,” says Smith of the Commerce Department. She ticks off things we now factor into the economic development equation: globalized markets, knowledge economy, the Internet, outsourcing and foreign competition. “The state’s economy is more diverse now, but we’re still transitioning from a low-skill manufacturing economy to a knowledge-based one.”

“When you look at the transfer of technology and the biotech industry, we have a very entrepreneurial base,” Smith states. “We’re still in our infancy in really figuring out how to support entrepreneurship, but there’s a lot going on.” She says that one of the most fascinating realizations is that “entrepreneurship

“Very few regions don’t have enough of the right assets to be successful; what’s lacking is the collaborations. Regional innovation is the key to thrive and survive in the global economy.”



^^ In a regional economic development study, AngelouEconomics asserts that “design-oriented activities will help Northwest North Carolina transition from traditional manufacturing into the future” and cited universities as an area strength. IARC’s student display (above) drew attention at a “Storytelling Through Design” digital arts symposium hosted in Winston-Salem. Scott Whitaker

opportunities are everywhere, not just part of one field.” For higher education not only to encourage it but also to participate in it is key to rapid growth. “What is especially exciting to think about is that now you don’t have to be in a big city to have a successful business. There’s a level playing field in that regard.”

And all the “players” are becoming proactive: universities are reaching out, and the business community is reciprocating. The Piedmont Triad Partnership (PTP) and the Greensboro Partnership already have identified collaboration with higher education as a major goal in their economic-development initiatives. The Greensboro Economic Development Alliance works with Gateway University Research Park and regularly collaborates with UNCG’s Bryan School of Business.

“Part of Greensboro’s story is that we have these great colleges and universities in the area,” says Dan Lynch, president of Greensboro Economic Development Alliance. “Having a relationship [with institutions of higher learning] is a critical component of what we do.” Lynch’s relationship with UNCG and Dr. James Weeks, dean of UNCG’s Bryan School, dates back to his MBA days at the university and he is also on the dean’s advisory board. “We collaborate often. Sometimes we’re working with a company that may locate in this area, and they want to talk with the dean in terms of flow of graduate students.” He stresses that “collaboration between business and universities will be key for all communities” in the future; “we must build on and refine the process we’ve begun.”

In PTP’s Regional Vision Plan, prepared in 2005, “the first goal area is education and workforce development, and the fourth objective under that specifically addresses a key role for higher education with respect to both innovation and collaboration,” states Jim Donnelly, PTP’s vice president for Innovation & Outreach.

“The basis for the United States to continue to be competitive is innovation,” Donnelly says. “Without question, the university is one place innovation is developed. That’s thought about much more broadly now—not just in science and engineering fields. Innovation can happen in a number of places including human environmental sciences.”

Donnelly stresses that linking education, economic development and the business community is important because this pools an area’s assets. “Very few regions don’t have enough of the right assets to be successful; what’s lacking is the collaborations. Regional innovation is the key to thrive and survive in the global economy.”

Donnelly asserts that collaborating must start within a university as an interdisciplinary approach. “Create an environment where professors, staff and students have incentives to be involved with people outside their disciplines. This makes innovation more likely to occur, and more likely to be successful.”

In late March, Donnelly met with Randall Kempner, vice president for Regional Innovation for the Council on Competitiveness based out of Washington, DC. He says that

Kempner believes above all else that “innovation is a contact sport.” Nothing replaces person-to-person interactions. “Making connections and creating a network of relationships is paramount.”

PTP’s vision plan led to its Workforce Innovation in Regional Economic Development [WIRED] project, which was selected in 2006 by the U.S. Department of Labor as one of 13 regions nationwide to receive a three-year, \$15 million WIRED grant to assist in transforming its regional economy. This is the first manifestation of the federal government’s new philosophy on regional economic development.

WIRED is allowing PTP’s creation of its Higher Education Innovations Council (HEIC), which will encompass leaders from area two-year and four-year colleges and universities. “[HEIC] will specifically focus on transfer opportunities for university-based knowledge and innovation and inter-institutional collaboration,” Donnelly states. “We’re really excited about what we can generate from this...how we can encourage continued growth, patents, licenses, and how we can use that to further create a culture of innovation.”

Universities Improve Communities

Universities affect communities in countless ways, some measurable and others harder to define. “Universities create a cultural environment,” Brod says. “You’re going to find more cultural activities—more museums and concerts, more exotic and ethnic restaurants...sports and other kinds of activities—in and around universities.”

Universities boost local economies, and the UNC Higher Education Bond is boosting the state economy. Economists estimate that every \$1 spent on local construction generates up to \$3.75 for the local economy. Using this as a gauge, the economic impact of the bond program will reach approximately \$9.3 billion.

Universities also improve their surroundings—and the economy—through direct service. HES epitomizes “linking the arts and sciences with human issues.” It does this through courses that are based in the community, such as the IARC Urban Studio that joined with Greensboro’s Department of Housing and Community Development to design and build a home for a couple in need. It accomplishes this through volunteer work, as in the case of SWK undergraduates providing over 20,000 professional social work hours to more than 34 human service agencies within the Piedmont and western North Carolina during one academic year.

HES influences the community through its centers. The Family Research Center, an integral part of HDFS, was established in 1977. Directed by Dr. Marion O’Brien, it fosters collaborative research on families and “works to communicate the results of our research to the wider community to enhance families’ lives and inform the decisions of policy makers.”

The Center for New North Carolinians (CNNC) began in 2001 as a result of UNCG Chancellor Patricia A. Sullivan’s initiative to better serve immigrant and refugee communities

in Greensboro. CNNC empowers immigrant populations through research and education, outreach and leadership programs. Projects reach toddlers, school-age children and adults through its early childhood development “Thriving at Three” program, Glen Haven Tutorial Center, Immigrant Health ACCESS Project and other projects. Recently, the center has received two substantial grants: \$150,000 from Duke Energy Foundation for a bilingual safety awareness program and \$48,160 from Blue Cross and Blue Shield of North Carolina Foundation for an emergency preparedness program. Through the UNCG Students First Campaign, under its economic impact, research and service imperative, \$500,000 is earmarked for CNNC to further its projects.

HES’s theme of children runs across all levels: academic courses, research, centers and programs both on campus, such as the five-star rated CCEP, and in the community. “Through a partnership with UNCG and Guilford Child Development’s pre-K program with schools, we serve nearly 2000 children who are vulnerable to school failure,” Britt shares. “They are receiving very high-quality instruction from a program that is evidence-based that the university is implementing for our teachers—Head Start and public schools—and this is making major improvements in our classrooms.” This program began with a partnership between NCA&TSU and UNCG and is now being expanded to include several other colleges and universities.

Across the United States, there is increasing realization of the economic importance of child care. In 2001, two studies about its economic impact could be found; by 2003, 19 were in progress. Good quality child care doesn’t only matter to parents and children; it has significant ramifications for the business sector: it can increase labor productivity and recruitment and reduce absenteeism and turnover.



^^ A retired engineer originally from Portugal, Pedro Tavares tutors H'Mai and H'Zung, both Montagnards from Vietnam. SWK’s Glen Haven Tutorial Center is just one example of how HES and UNCG positively affect our diverse Triad community. Scott Whitaker

The absence of quality child care can bring about even steeper, long-term effects. At its heart is human development. “We have to look at the flip side,” Britt urges. “Kids arrive [at public school] not prepared...that frustration can boil over into antisocial behavior and create all kinds of problems.” Problems that sometimes lead to juvenile detention or worse. Britt says that society can fund good early childhood education programs to close the readiness gap or spend much more money on long-term problems that too often threaten to shadow those children (and the communities in which they live) throughout their lives.

Studies in the last three years have repeatedly shown that the internal rates of return for early care and education investments are high



^^ Dean Sims enjoys CCEP's 75th anniversary event; Dr. David Demo, HDFS chair, says “the program is a vital resource for our department, school, university and community.” Scott Whitaker

both locally and regionally. Child care advocates are being joined by economists in reinterpreting such program “expenditures” as investments in economic development.

Britt says that HES, under the leadership of Dean Sims, is

“doing dramatic things” in this area. He says quality child care and early childhood education “enhance and empower the community. To prepare children for life is an important social and economic contribution. In the information age, we need the best and brightest,” and he stresses that we can’t afford anything less.

“[North Carolina’s] Governor Mike Easley and everyone collectively is working hard to determine what must be done to offer the same opportunities to all of our kids,” Smith of the Commerce Department says. “Children are the workforce of the future. They must be successful for us to be successful in the global marketplace.”

“Over the last 10 years in particular,” Boney notes, “the UNC System and a number of colleges and universities across the country have begun engaging in different activities that are related to the broad notion of economic development. Those activities range from very applied hands-on, direct service-related activities to an increased emphasis on translating innovation and research out of the laboratories and minds of professors and into the marketplace.”

“Last May we declared it a strategic priority of the UNC System to participate in and help to lead in the economic transformation of the state,” Boney adds. “Erskine Bowles gave it this status to help the state get through what he described as the ‘economic tsunami’ we are facing.”

“What we’ve done over the last few months,” Boney

continues, “is to try to bring together a group of representatives from each of the 16 campuses to begin putting the flesh on the bones of that strategic priority.”

“The UNC System is a clear leader in forging alliances with business and industry, and UNCG has demonstrated its commitment to this vision,” Chancellor Sullivan is quoted as saying during her remarks at UNCG’s Corporate Expo. “In addition to continually improving our core educational programs, UNCG is already pursuing joint initiatives with a variety of universities, businesses and other organizations. We are partnering with county governments for economic development, starting business incubators that will pay dividends well into the future, and creating courses that develop students into inventive and savvy entrepreneurs.”

Among UNCG’s “High Priority Goal Clusters for 2006–2007” is what was deemed a highest priority goal cluster for research in 2006–2007 to facilitate economic development and research funding: “Establish and maintain collaborations and alliances among academic institutions, Action Greensboro, economic development agencies and industry.”

In February 2007, the UNC Board of Governors launched University of North Carolina Tomorrow. The 18-month initiative will determine how the campuses can best meet the needs of the state and its people over the next 20 years. The commission includes business, education, government and nonprofit leaders from across the state.

“We have an open, vibrant, flexible economy that can reinvent itself—and it always has reinvented itself. As long as we keep focusing on the role of education we can compete

on the basis of knowledge and talent rather than who can do the job for the least money,” Brod asserts.

Boney says marrying higher learning and industry won’t compromise either but instead, strengthen both. “We have to find a way to get the balance right,” he maintains. “If we don’t, we miss a singular opportunity for [higher education] to lead us into the 21st century. We’ve got the smartest people in North Carolina working at and attending our colleges and universities. If we aren’t at least partially about the business of determining where our economy is going, what it’s doing, what it’s going to look like...what kind of nonprofit solutions we have, innovations we create, then our colleges and universities can’t be strong. Keeping them strong—that’s the challenge and opportunity.”

Britt asks a simple question. “In the information age, who is the guardian of information?” He pauses, then laughs as he answers. “Universities!” He reminds us it is also colleges and universities who are the nurturers of technology, research and human capital. “That’s the job of universities. In this age, human capital is the most important because it’s the foundation on which the information age rests.”

Brod says that the ivory tower has been crumbling into a myth for quite some time. “Universities realize they have a big role in their communities...and a collaborative relationship with society educates students best.”

Dean Sims agrees. “That’s what the School of Human Environmental Sciences is all about—testing research and implementing programs in the ‘real world’ to improve the quality of life!” ☺

NC Research Campus Focuses on Nutrition

ALREADY A LEADER IN THE \$30-BILLION-A-YEAR biotechnology industry, North Carolina is beaming with its newest 350-acre, \$1 billion addition to the biotech field projected to open in February of next year. The North Carolina Research Campus, being constructed on the site of the former Pillowtex Corporation headquarters in Kannapolis, will combine universities’ and colleges’ research power with the experience of private enterprise to create a biotech hub that focuses on human nutrition and wellness.

“We’re thrilled to be a part of it; it’s an exciting opportunity,” said Dr. Deborah Kipp, chair of the Department of Nutrition. UNCG is one of the universities involved with the research campus within the biotech center; others include UNC Chapel Hill, UNC Charlotte, UNC Central, NC A&T State University, NC State University, Duke University and the NC Community College System.

At the North Carolina Research Campus, the university will establish the UNCG Center for Research Excellence in Bioactive Food Components. Seizing the expertise within the Department of Nutrition, innovative research programs will

be focused in areas related to the role of bioactive components of foods, such as fruits and vegetables, in preventing and treating obesity and chronic diseases. For example, certain components of food, such as antioxidants in blueberries, are singled out in research and results may show if specific benefits exist for humans.

“What [UNCG] will do is to provide a focus that is complementary to Chapel Hill and State and build on our department’s strengths,” said Kipp. “We have a unique niche.”

“We’ve positioned ourselves so we can easily see connections with NC State—altering components of berries, fruit—and the Chapel Hill component—doing clinical studies—and work with the other participating institutions as all of our programs develop,” said Kipp. “We see this as an opportunity to work with all of them in a high-tech, innovative, collaborative environment with state-of-the-art equipment.”

Functioning as a satellite center of the Department of Nutrition, two UNCG senior research professors/research scientists will be hired and their research assistants and staff will utilize 5100 square feet of lab and office space on the

fourth floor of the UNC Nutrition Research Building. “One of the two scientists would oversee the operations of the center and interact with other directors on that campus,” Kipp noted. “We’ll also make a major effort to integrate [the Kannapolis] research with our department,” Kipp added.

The UNCG Center for Research Excellence in Bioactive Food Components has received \$600,000 in state funds this fiscal year; next year it expects to receive \$1.8 million, the bulk of which will go toward equipment and other start-up costs.

Supported by David H. Murdock, owner and chairman of Dole Food Company, plans for the North Carolina Research Campus also include an initial 311,000 square foot building to house the core laboratory, a state-of-the-art contract manufacturing biogenic facility and tenants. There will be one million square feet of office and laboratory space, 350,000 square feet of new retail and commercial space and approximately 700 new residential units. Also located on campus will be a new hotel and wellness center, 1000-seat auditorium and city government center. And a girls’ school will be built for junior and senior high school students from across the



^^ A rendering of the UNC Nutrition Research Building provides a taste of the future for North Carolina. courtesy of Castle & Cooke

country who excel in math and science. “With Mr. Murdock’s passion for health and nutrition, compatibility with North Carolina agri-business and natural partnerships with top-notch universities, [the biotechnology concept]...continues to yield more and more potential,” Lynne Scott Safrit, Castle & Cooke president and project manager, has said. ☺

—Emily-Sarah Lineback