

## North Carolina Research Campus Fact Sheet

### Purpose

The North Carolina Research Campus (NCRC) is a private-public venture created to foster collaboration and further knowledge in biotechnology, nutrition, agriculture, and health

### The Visionary

The visionary behind the NCRC is Mr. David H. Murdock, owner of Dole Foods Company, Inc. and Castle & Cooke, LLC. His combined companies employ more than 68,000 people in over 90 countries and rank as one of the largest privately held entities in the United States. He is a long-term advocate of healthy eating and physical activity. His vision for NCRC is to create a world class research hub where collaborative science will lead the charge for great discoveries in nutrition, health and biotechnology research.

### David H. Murdock Core Laboratory Building

- 311,000 square foot facility located in the center of the NCRC designed for laboratory and office use.
- Anchored by the David H. Murdock Research Institute, a nonprofit foundation that will house over \$150 million of state-of-the-art scientific equipment. This equipment will be available for use by tenant universities and companies. The core laboratory equipment will occupy over 100,000 square feet of space.
- A highlight of the equipment: the Bruker 950-megahertz nuclear magnetic resonance spectrometer—the world’s most powerful superconducting magnet. The two-story, 8-ton machine will significantly enhance key areas of research, such as drug development and nutrition. The NMR will allow scientists to deduce the structure of larger and more complex molecules. This will lead to many discoveries of new therapies or to uncover how certain vitamins cause changes in cells.

### Partial list of tenant companies

- *Anatomics*—Anatomics is an international, privately held medical device company producing the highest quality custom-made implants and surgical biomodels for surgeons and hospitals. Founded in 1996, the company has offices and manufacturing facilities in Australia and the United States. Anatomics is dedicated to manufacturing, developing and marketing innovative technologies for improved surgical outcomes.
- *Carolinas Medical Center*—Carolinas HealthCare System is the largest healthcare system in the Carolinas, and one of the largest publicly owned systems in the nation. CMC-NorthEast will be housed in the Medical Office Building on campus and involved with the M.U.R.D.O.C.K. Study along with Duke University.
- *Dole Foods Research & Development Group*—Owned by David H. Murdock, Dole Foods Research and Development will have a large presence on campus, sharing a building with North Carolina State University and collaborating with a large number of researchers from the various entities located on campus.

- *IMAF (Inception Micro Angel Fund)*—IMAF Kannapolis is part of the Inception Micro Angel Fund Family of Funds, which is a group of committed, member-managed seed-stage angel capital funds. These funds are designed to capitalize on the growth in entrepreneurial activity and venture financing, throughout the state of North Carolina and in selective areas of Virginia, South Carolina, Georgia and Tennessee.
- *Lab Corp*—Headquartered in Burlington, North Carolina, LabCorp is one of the world's largest clinical laboratories. The company is a pioneer in genomic testing and the commercialization of new diagnostic technologies.
- *PPD*—Pharmaceutical Product Development, Inc., (PPD) is a contract research organization (CRO) headquartered in Wilmington, North Carolina with offices in more than 30 countries. With a variety of clients and partners, including pharmaceutical, biotechnology, medical device, academic and government organizations, PPD provides discovery, development, and post-approval services, along with a compound partnering program.
- *Red Hat*—One of the largest and most recognized companies dedicated to free, open-source software, Red Hat provides operating system platforms with middleware, applications and management solutions. The company is headquartered in Raleigh, North Carolina.

#### Universities and Community College Involvement at NCRC

- *Duke University*: Duke University's Translational Medicine Institute will focus on speeding the movement of new therapies from the research lab to the patients who need them most. The Institute will streamline the process for getting diagnostic technologies, prevention efforts and therapies into the hands of physicians and other healthcare providers. As part of this focus, the University is leading the M.U.R.D.O.C.K. Study, which has the potential to revolutionize healthcare by finding ways to match treatment to a patient's genetic profile.
- *UNC Chapel Hill*: Using advanced genomic and metabolomic biotechnology, the new Nutrition Research Institute (NRI) will develop innovative approaches to understanding the role of diet and activity in normal brain development, cancer prevention, and the prevention and treatment of obesity. The Institute will study individual metabolic variations to develop nutrition solutions that are targeted to the individual, allowing healthcare professionals to provide patient-specific treatment
- *NC State University*: The North Carolina State University Fruit and Vegetable Science Institute is one component of an integrated effort across the North Carolina Research Campus to utilize emerging technologies for plant improvement and human health benefits. Staffed by the N.C. State University College of Agriculture and Life Sciences, the role of the Institute is to develop a new generation of fruits and vegetables with superior nutritional and horticultural characteristics. Researchers will use the most advanced scientific tools to provide

new insights into cellular processes, then translate these breakthroughs through genomics and plant breeding into plants with desired traits.

- *UNC Charlotte:* UNC Charlotte's Bioinformatics Research Center (BRC) defines bioinformatics as the "discovery, development and application of novel computational technologies to help solve important biological problems." At NCRC, the Center will provide specialized computer systems and software, data management solutions and analysis for academic researchers and biotechnology companies. In this role, BRC will offer sophisticated computational support in the design and development of new research and technologies.
- *North Carolina Central University:* North Carolina Central University's Nutrition Research Program will perform groundbreaking work on Zebrafish and rodent cancer models to advance knowledge of human nutrition at the cellular and genetic level. This program will seek to complement and strengthen the metabolomics and genomics focus of the other UNC partners conducting research in the UNC Center for Nutrition Building.
- *NC A&T State University:* NC A&T State University's Center of Excellence for Post Harvest Technologies (CEOPHT) will conduct cutting edge research in post harvest technologies and food science. Post harvest technologies focus on improving the quality and safety of food after it has left the farm. CEOPHT's goal will be the development of multidisciplinary programs focused on post harvest technologies including research pertaining to processing, preservation, consumer research, recovery of health promoting food components, food safety issues, storage stability and quality, and value-added product development for food and non-food uses. The program will create new jobs and enhance economic opportunities for the agricultural sector of the State of North Carolina along all components of the supply line, from producers to consumers.
- *UNC Greensboro:* The UNC Greensboro (UNCG) Center for Research Excellence in Bioactive Food Components at NCRC is a satellite to the UNCG Department of Nutrition, School of Human Environmental Sciences on the UNCG main campus. The focus of the Center's research will be to understand cellular and molecular mechanisms of action in bioactive food components and the molecular targets for these dietary components. The Center will also focus on expanding the fundamental understanding of these components and their benefits to human health and wellness, healthy aging, and prevention of diseases such as cancer.
- *Rowan Cabarrus Community College:* RCCC will be instrumental in providing a workforce for the NCRC community. RCCC will have its own location at the NCRC and will offer several new degree programs in biotechnology and agricultural biotechnology.

For further information on the NCRC, please visit [www.ncresearchcampus.net](http://www.ncresearchcampus.net)  
For further information on the DHMRI, please visit [www.dhmri.org](http://www.dhmri.org)