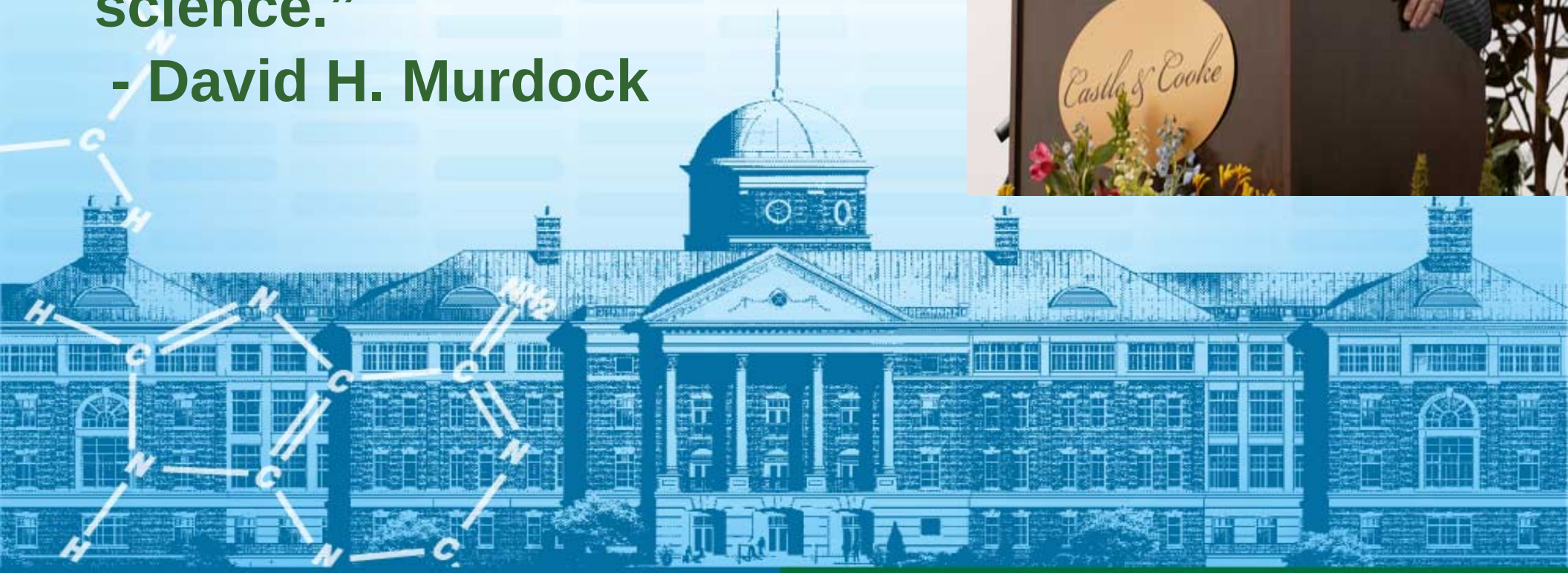
North Carolina Research Campus
Kannapolis, NC

Why me?

- Came from Kannapolis area to UNC in 1966
- Began working in RTP in 1971 (RTP had begun in the late ’50s)
  - Part of the reason for RTP was to keep people (like me) in NC with good, valuable jobs
- Worked for 3 RTP Companies in 36 years (RTI, UCAP, and BD) all in R&D
- Have been in Business Development working with Start-up companies and University technologies for the last 8 years
- Working with Kannapolis people as a liaison to RTP
  - Some of the people went to HS with me!
- I am committed to helping make this work

“Science seeks solutions to challenges that confront humanity. The research campus seeks solutions to challenges that confront science.”

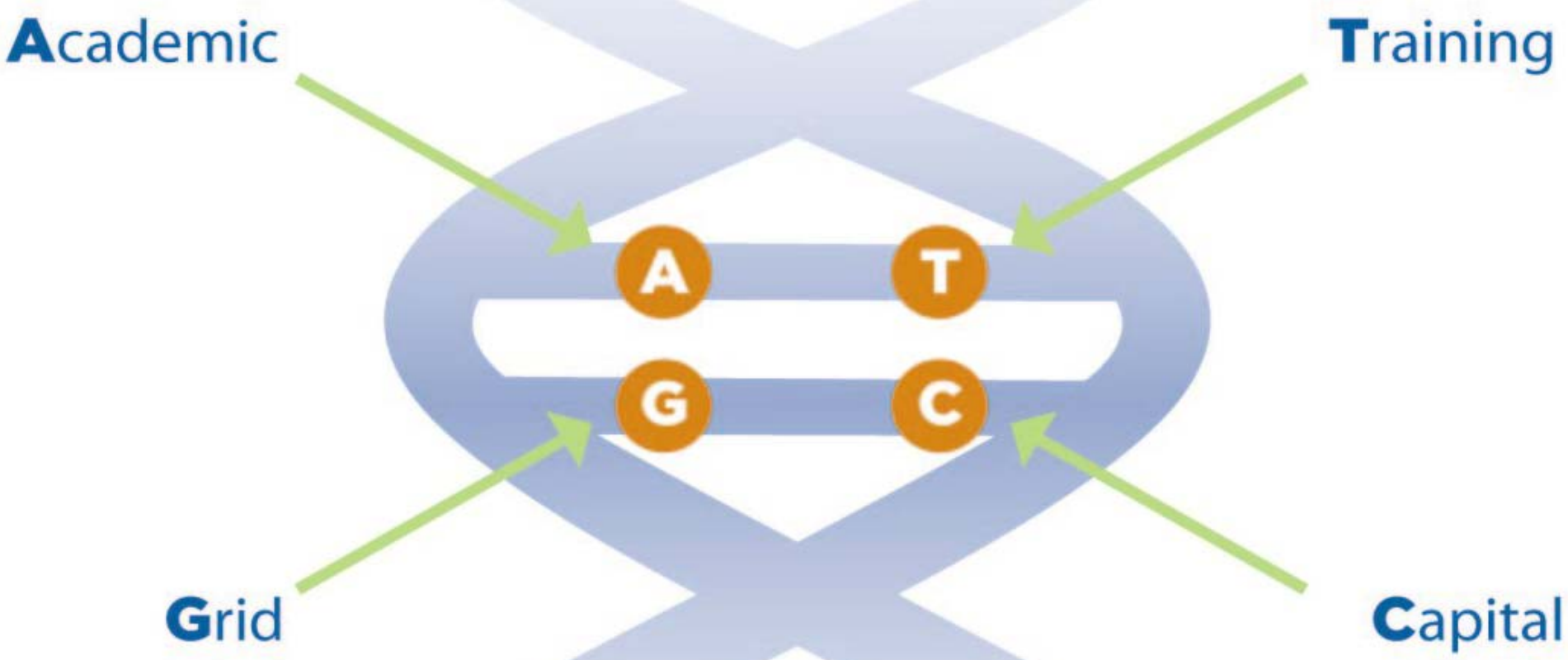
- David H. Murdock



NORTH CAROLINA RESEARCH CAMPUS

Genetic Make-Up

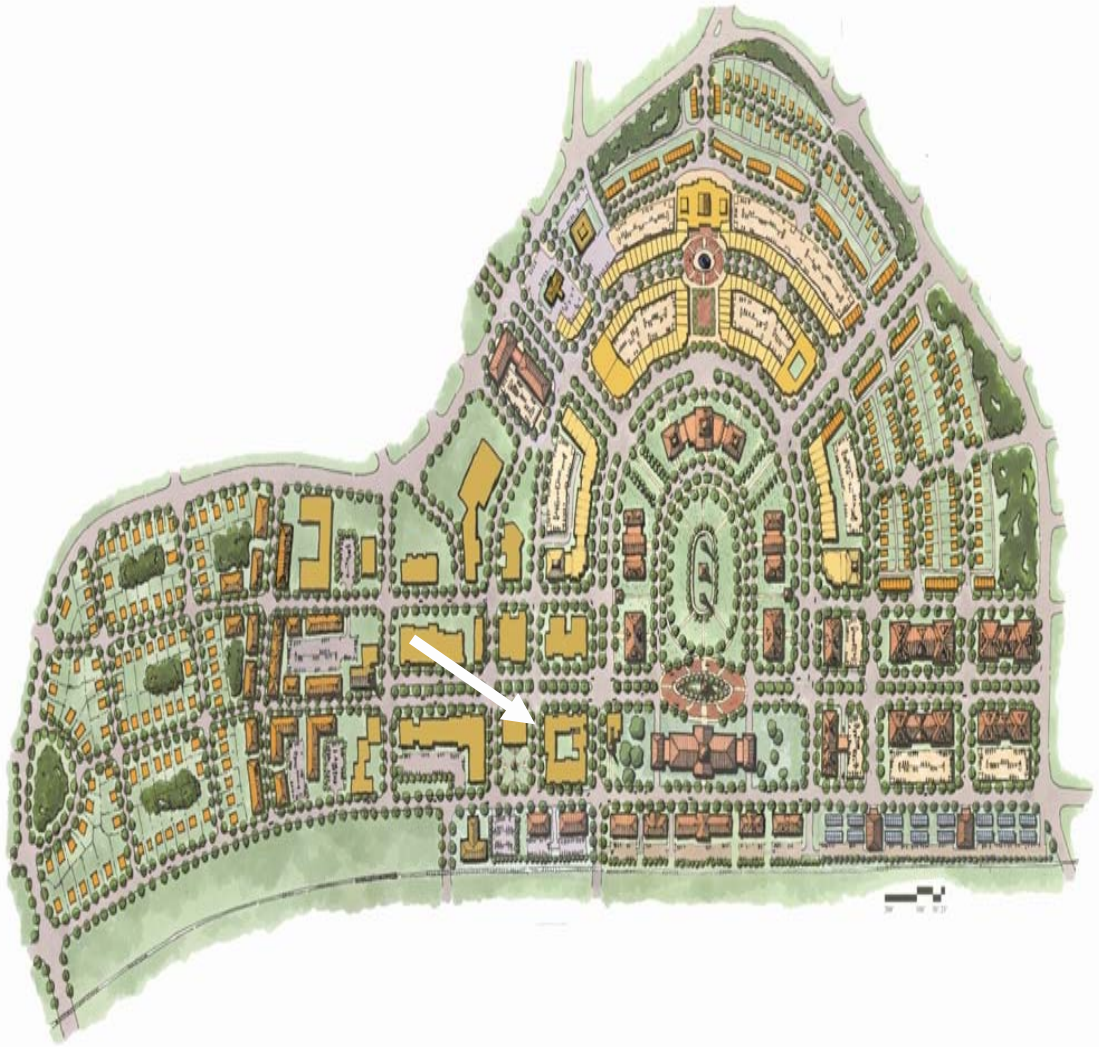
Knowledge Economy




Downtown Charlotte
Aerial From the North

Campus Snapshot

- 350 acre, mixed used development
- Seven Research Universities
- Community College Partnership
- Core Laboratories
- CMC/NorthEast Medical Center
- Family Medicine Research Center
- Anchor Life Science Company



Phase 1


Carolinas HealthCare System
NORTH CAROLINA CENTRAL UNIVERSITY
FOUNDED 1910
UNCG
NC A&T
AGGIES
Dole
UNCCHARLOTTE

David H. Murdock Core Laboratory Building

311,000 Square Feet – June 2008 Occupancy

The David H. Murdock Research Institute

A public charity dedicated to the advancement of scientific discovery

Core Disciplines will include:

- Metabolomics
- Molecular Genomics
- Histochemistry
- Transgenic Animal Lab
- Nuclear Magnetic Resonance
- Proteomics
- Integrated Microscopy
- Clinical Discovery
- Cell Culture
- 24,000 SF Vivarium for small rodents

North Carolina Research Campus

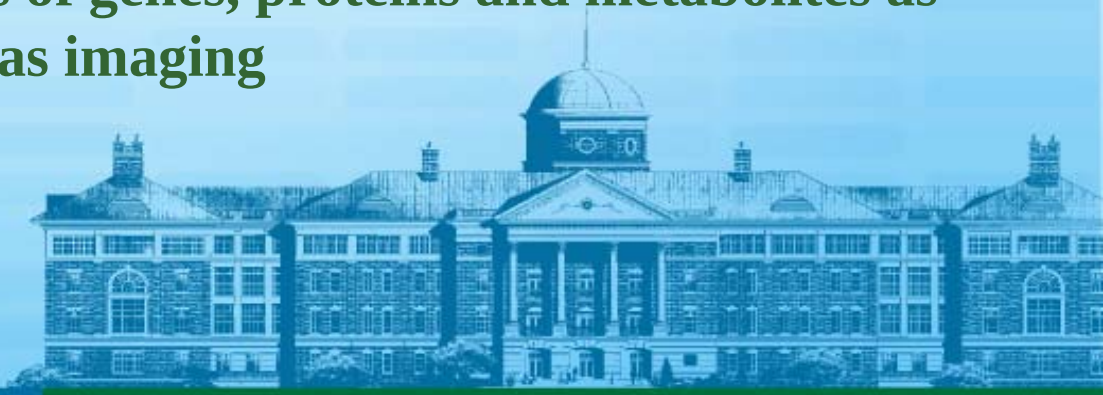
Challenge: Leading research

Solution: Partnerships with knowledge leaders

NORTH CAROLINA RESEARCH CAMPUS

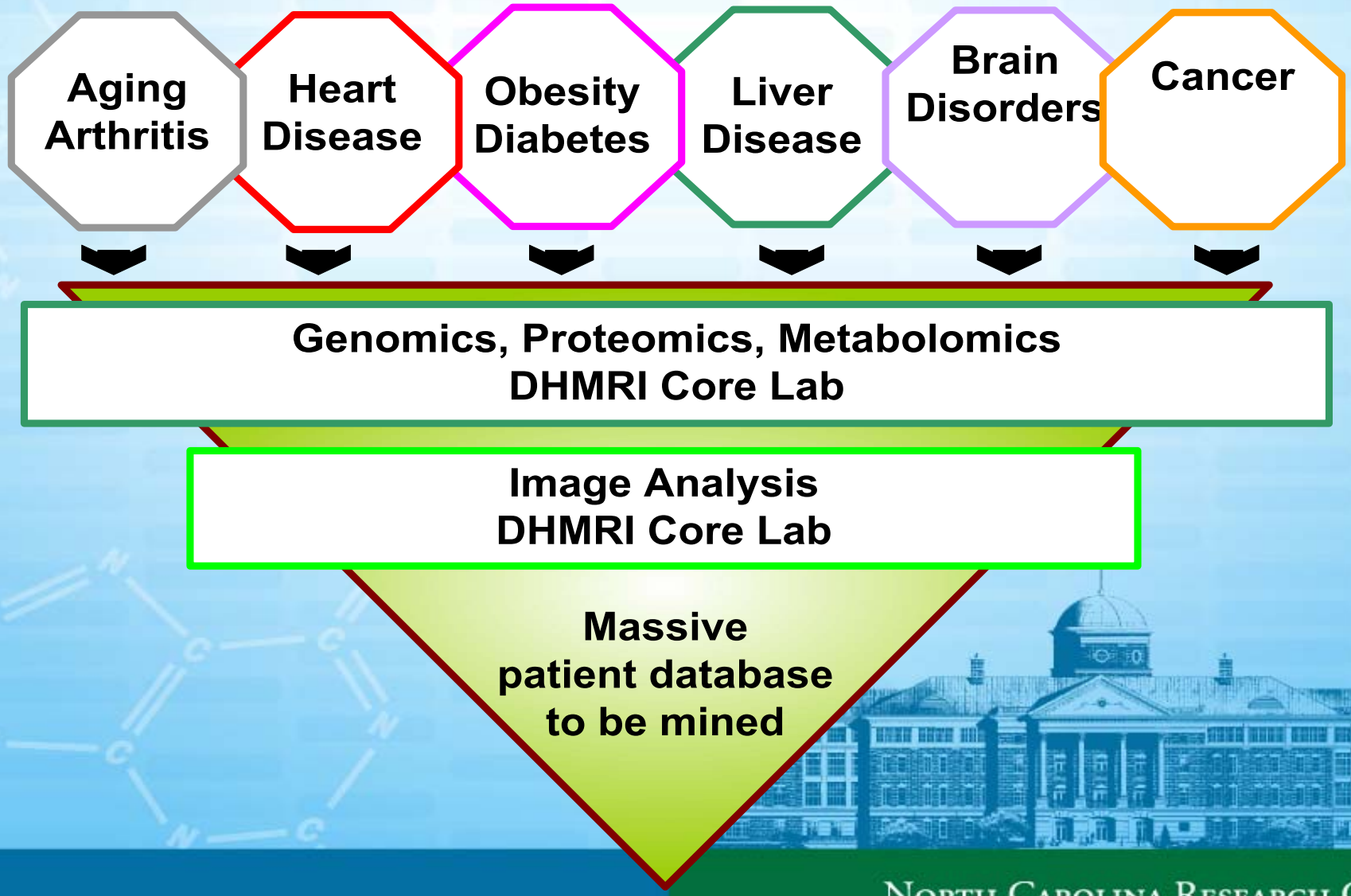
Duke University: Measurement to Understand Reclassification of Disease Of Cabarrus -Kannapolis Study (The M.U.R.D.O.C.K. Study)

Duke is expected to rewrite the textbook of medicine by reclassifying health and disease using genomic technologies and electronic health records. Our current understanding of disease is based upon crude characterizations of clinical characteristics, radiographs and laboratory testing. To segment diseases more effectively, The M.U.R.D.O.C.K. Study will combine modern clinical research methodology, which has established statistical and operational standards, with dramatically more effective characterizations of genes, proteins and metabolites as well as imaging



North Carolina Research Campus

Focus of the MURDOCK Study



Academic Institutions

UNC-Chapel Hill

NC State University

NC A&T State University

Duke University

UNC-Charlotte

UNG-Greensboro

NC Central University

NC Community Colleges (RCCC)

Science at NCRC

- Focused on several disciplines, including nutrition, wellness, obesity, heart disease, diabetes, cancer, osteoarthritis, medical devices, and agriculture
- Hopes to expand to other fields such as nanotechnology, biophysics, and various other arenas of biomedical research, including biomedical engineering.

North Carolina State University

At the NC Research Campus, NC State is extending its outstanding programs bridging basic life science research to real world agricultural applications by establishing the world's first institute dedicated to the use of genomics, bioinformatics, and systems biology to enhance plant breeding. The major focus of the NC State Institute for Fruit and Vegetable Science Institute at Kannapolis will be to increase the yield of vegetable crops in diverse growth environments, while at the same time improving nutritional quality.

NORTH CAROLINA RESEARCH CAMPUS

University of North Carolina at Chapel Hill

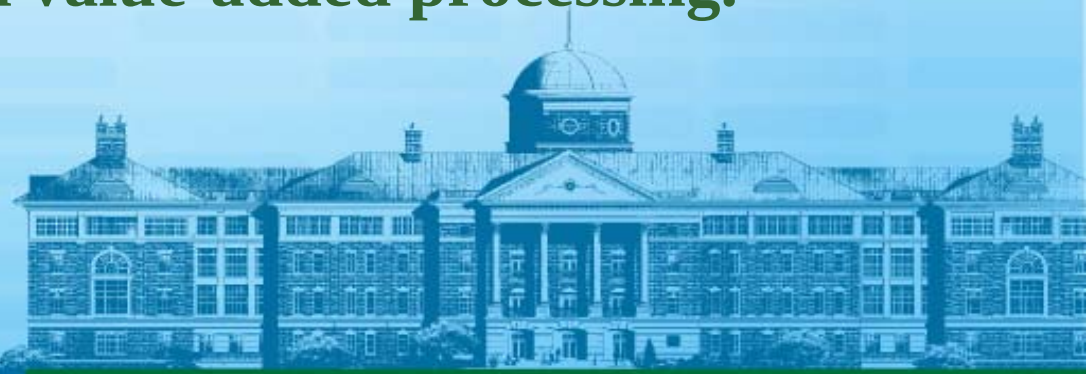
UNC Nutrition Institute

The NRI will use cutting edge genomic, proteomic and metabolomic biotechnology to develop innovative approaches to understanding the role of diet and activity in normal brain development, in the prevention of cancer and in the prevention and treatment of obesity and eating disorders.

North Carolina Research Campus

North Carolina A&T State University

The primary focus of NC A&T is to provide an infrastructure for multidisciplinary research programs focusing on post harvest technologies for agricultural crops and to play a lead role in developing appropriate, need-based and cost effective post harvest technologies to address related food science, nutrition, and health issues. These issues include processing and preservation, storage stability, safety and quality, composition, recovery and identification of bioactive compounds for health applications, product development, consumer research and value-added processing.



North Carolina Research Campus

UNC at Greensboro

The focus of research to be conducted in this Center will be cellular and molecular mechanisms of action of bioactive food components, to understand molecular targets for these dietary components and expand our fundamental understanding of their benefits to human health and wellness, healthy aging, and prevention of diseases such as cancer. The bioactives to be studied may include components of blueberries, raspberries, and other berries (flavonoids like anthocyanins that may act as antioxidants), tomatoes (lycopene that may have anticancer properties), or red wine (resveratrol that may influence heart health.

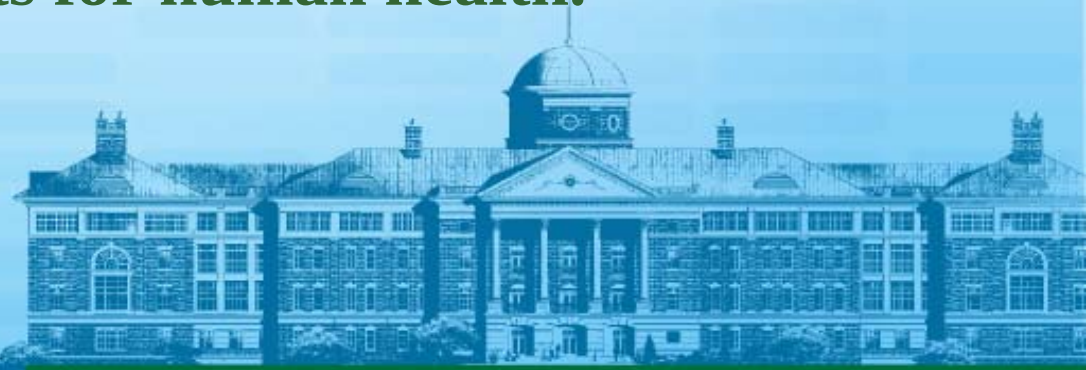
North Carolina Central University

NCCU's program will utilize Transgenic Zebrafish and rodent Cancer models to assess the effects of nutritional requirements on brain development, cardiovascular disease, obesity, neurological disorders and cancer. The program will also utilize these models to investigate the potential chemopreventive action of dietary compounds or functional foods.

NORTH CAROLINA RESEARCH CAMPUS

UNC Charlotte Bioinformatics Research Center

The UNC Charlotte campus will run a bioinformatics core facility, which will develop methods and tools to analyze the complex information that emerges from work at the research campus. Charlotte faculty members will collaborate with researchers at other institutions to manage and interpret data and to translate the results into practical benefits for human health.



North Carolina Research Campus

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