

THE MATCHUP

Today's game features two of the nation's leading public research universities known for providing students an outstanding education at a strong value — and for excellence in research that greatly impacts their states and nation.



ORLANDO, FLORIDA

No. 1

Provider of Aerospace and
Defense Talent in the Nation
(*Aviation Week Network*)

Top 20

Public University in the Nation
for Producing Patents
(National Academy of Inventors)

65,900

First-Year Student Applications,
a Record High, for 8,100 Spots
in Summer and Fall 2025



CHAPEL HILL, NORTH CAROLINA

No. 1

Best Value Public University
20 Times in a Row
(*U.S. News & World Report*)

No. 9

Largest U.S. University for
Total Research Volume and
Annual Expenditures
(National Science Foundation's
HERD 2023 Survey)

15,789

Jobs Created for North Carolinians
by UNC-Affiliated Startups

FEATURED FACULTY RESEARCHERS

UNIVERSITY OF CENTRAL FLORIDA

SARAH BUSH

*Professor, K-12 STEM Education, and
Lockheed Martin Eminent Scholar Chair*

Bush directs the Lockheed Martin/UCF Mathematics and Science Academy, which has **strengthened the quality of K-12 STEM education across Central Florida** by providing tuition support and helping more than 725 math and science teachers earn master's degrees. Graduates inspire children to love math and science, increasing the likelihood they'll pursue STEM careers. They also learn how to adopt innovative technologies such as AI in their classrooms.

UNIVERSITY OF NORTH CAROLINA

JEFFREY STRINGER

*Professor of Obstetrics and Gynecology
at the School of Medicine*

Since joining UNC-Chapel Hill in 2012, Stringer has launched and directed the School of Medicine's Division of Global Women's Health, **securing more than \$120 million in external funding for maternal health research**. Awarded the prestigious Oliver Max Gardner Award in 2025, his team is working to develop a [portable ultrasound device](#) enhanced with AI to improve rural access to sonographs and the vital data they reveal during pregnancy.

POINTS OF INTEREST

UNIVERSITY OF CENTRAL FLORIDA



Lockheed Martin Partnership Fuels Prosperity

UCF and Lockheed Martin are **expanding a longtime partnership that has greatly benefited student success and Florida's economic prosperity**. More than 10,000 UCF students have gained invaluable experience through the Lockheed Martin College Work Experience Program and many are offered full-time jobs.

As a new UCF Pegasus Partner, Lockheed Martin has [committed to expanding that program and to growing research](#) with UCF's world-class faculty in autonomous systems, AI, machine learning, augmented and virtual reality, robotics, advanced manufacturing and hypersonic technologies. Both organizations also will work together to pursue joint federal funding opportunities that strengthen cutting-edge research and development.

Boosting Engineering Research and Teaching

At Florida's Premier University for Engineering, Technology and Innovation, [39 new faculty members](#) have joined the College of Engineering and Computer Science this fall, bringing expertise that will **strengthen teaching and research in AI, hypersonics, semiconductors and digital twins**.

UCF, which leads Florida in bachelor's degrees awarded in engineering, enrolls 16,800 engineering and computer science students. UCF has hired more than 100 new engineering and computer science faculty members over the past three years. Many are part of UCF's new Institute of Artificial Intelligence, a bold initiative bringing together faculty working to enhance education and drive discovery.

UNIVERSITY OF NORTH CAROLINA



Rapid Chemical Analysis Helps Frontline Workers

Two decades ago at UNC-Chapel Hill, a chemist wondered: What if the most powerful chemical detection tool in the world — mass spectrometry — could be shrunk to fit in the palm of your hand?

Today the answer is saving lives. UNC-Chapel Hill chemist J. Michael Ramsey's [hand-held mass spectrometer](#), MX908, is currently deployed in 55 countries helping agencies like U.S. Customs and Border Protection **detect chemical threats at borders and in local communities**. Whether it's a police officer, firefighter or mailroom worker encountering a street drug or substance, the technology provides fast, actionable information so they can make crucial decisions.

Revealing Repetitive Flooding in Overlooked Areas

A new study from UNC-Chapel Hill researchers in the Environment, Ecology and Energy Program and the Department of City and Regional Planning reveals that repetitive flooding in North Carolina is far more common and widespread than FEMA's records indicate.

Utilizing machine learning, the **research recreated 78 previously unmapped flood events in North Carolina**. The findings revealed [43% of them located outside FEMA's designated 100-year floodplains](#). Many government programs, from FEMA disaster relief to building policies, are set by the existing designated floodplain. By creating a more complete picture of where repetitive flooding has already occurred, researchers hope the data can help guide more effective government programs and policies.