



NC STATE

THINK AND DO
THE EXTRAORDINARY

Administrative Leadership Meeting

Kevin Howell

Chancellor

Tuesday, September 15, 2026

Upcoming ALMs

Next Meeting

November 10

Topic TBD

Titmus

Following Dates

- January 12, 2027
- March 9, 2027
- May 11, 2027

Beginning of the Semester Events

- Convocation
- Packapalooza
- Christina Koch Homecoming
- Pullen Society Luncheon
- NC State Honors





Research Grants

- FutureTEX Award – \$480 million for Defense Textile Manufacturing
- SPEED – \$20 million for AI, robotics, and autonomous labs in chemistry and materials science

NC State Research and Innovation: FY26 in Review and What's Ahead

Krista Walton, Ph.D.
Vice Chancellor for Research and Innovation

The University Research Mission

Research is not just an activity at NC State — it is the engine that drives our education, innovation and impact

1. We are a knowledge-creating institution
 - New discoveries lead to new technologies and startups
2. Research and doctoral education are inseparable
 - PhD students and faculty discovery power the entire system
3. Scale matters
 - Today's research environment requires coordination, infrastructure, and speed

Today's Agenda

1. FY26 Research Update
2. Scaling the Research Enterprise
 - What growth and complexity require from NC State
3. Strengthening Our Research Infrastructure
 - Changes underway to modernize research administration and better support research at scale
4. New Initiatives and Major Wins
 - Recent awards, partnership, and emerging opportunities

Research at a Glance



**\$4.5
BILLION**

Awarded to
nearly 23,000
total research
projects
2016-2026



**#1
ENGINEERING
PHDs
CONFERRED**

In North Carolina
(13th nationally)



**\$765M
RESEARCH
EXPENDITURES**

In FY 25
(Reported to NSF
HERD)



**#1
ACTIVE
COMMERCIALIZATION
AGREEMENTS**

Universities without medical
schools AUTM 25

FY 24 Research Successes (Most Recent HERD Data)

#6

**All research
expenditures**
among public
institutions without
a med school

#5

**Industry
research
expenditures**
among public
institutions
without a med
school

#5

**USDA
Funding**
among all
universities

**For most federal funding agencies,
NC State is the top funded university in the state.**

#1

DOE

#2

DOD

#1

NASA

#1

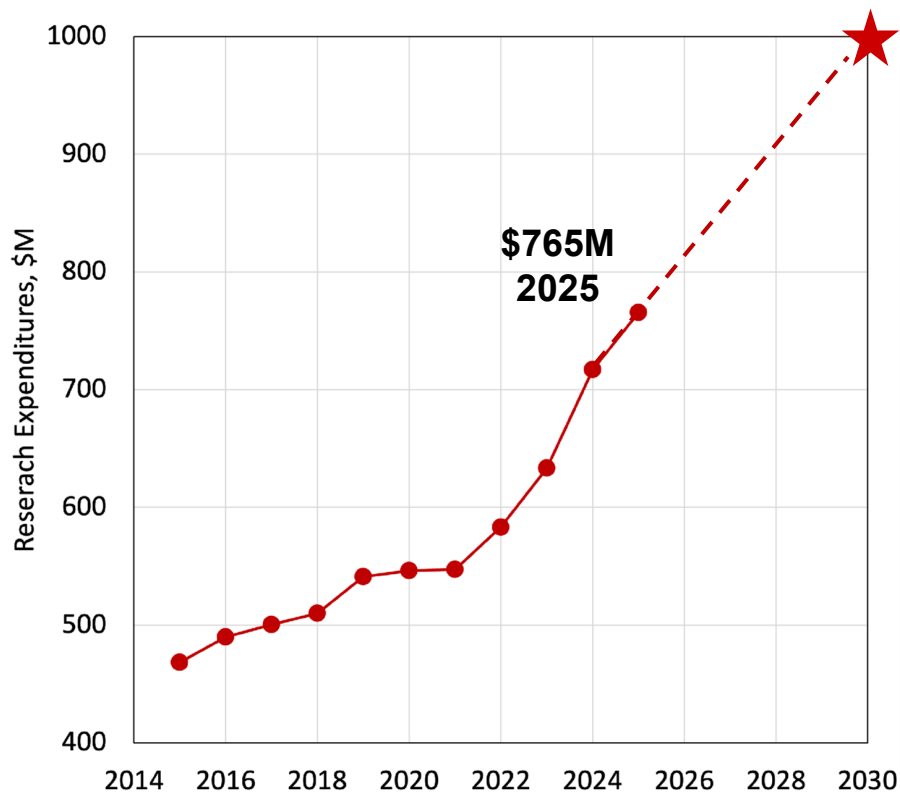
NSF

#1

USDA

FY 24 HERD Data (Most Recent)

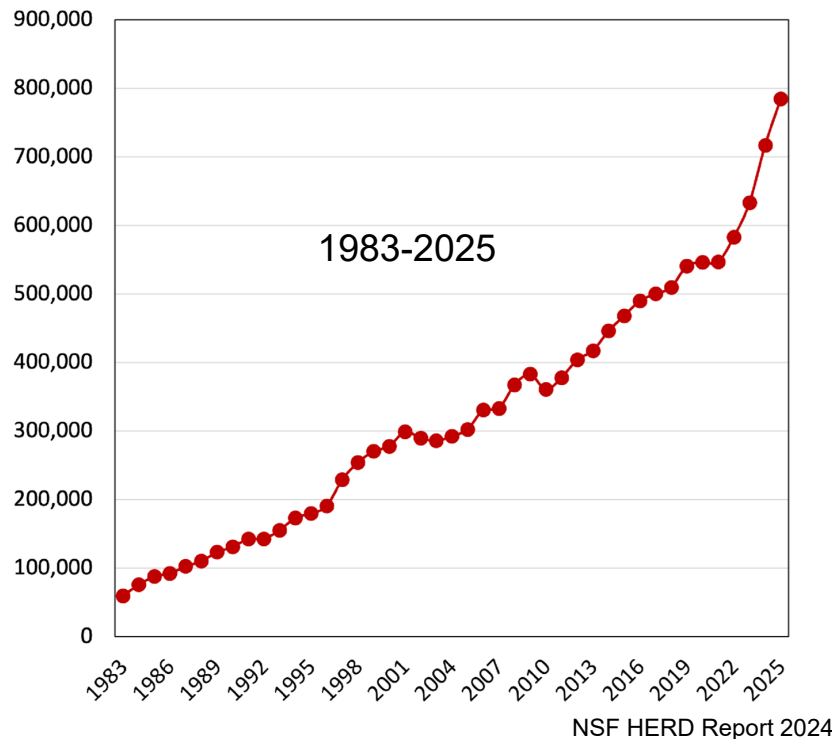
Growth in NC State Research Expenditures



- Research expenditures have grown from ~\$500M to \$765M over the past decade
- Growth across all categories
 - Federal, state, industry, institutional
- Reflects strong faculty productivity and institutional momentum
- Current growth rate indicates reaching ~\$1B in research by 2030

Research Scale and Complexity Have Changed

- Larger awards require coordination, infrastructure, and speed
- Increased compliance, security, and reporting expectations
- Growth in multi-institutional work
- Greater visibility and scrutiny at the national level
- Example: CLAWS DoD Hub



We are operating at a scale that exceeds many of our legacy systems

What Increased Complexity Really Means

Typical NSF Grant

Scale: ~\$300K–\$500K total

Team: 1 PI + a few grad students

Scope: Focused research question

Partners: Minimal or none

Management: PI-led, department-level support

Compliance: Standard (IRB, reporting, etc.)

Outputs: Papers, PhD students trained, IP generated

What Increased Complexity Really Means

Typical NSF Grant

Scale: ~\$300K–\$500K total

Team: 1 PI + a few grad students

Scope: Focused research question

Institutional Support: Lab space, computing resources, etc

Partners: Minimal or none

Management: PI-led, department-level support

Compliance: Standard (IRB, reporting, etc.)

Outputs: Papers, PhD students trained, IP generated

NSF Hub/DoE Center/DoD Hub

Scale: \$10M–\$100M+ over multiple years

Team: Dozens of faculty across disciplines + multiple universities + industry + government

Scope: Integrated research + workforce development + translation + economic impact

Institutional Support: Cost share, GRA support, staff support, salary matching, equipment purchases, operational support, F&A return for shared resources, state support

Partners: Required (industry, community colleges, state agencies, nonprofits)

Management: Dedicated leadership team, program managers, financial oversight, external advisory boards

Compliance: Export control, data governance, workforce tracking, national reporting expectations

Outputs: Technologies deployed, startups, workforce pipelines, regional economic outcomes



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Research Infrastructure Assessment

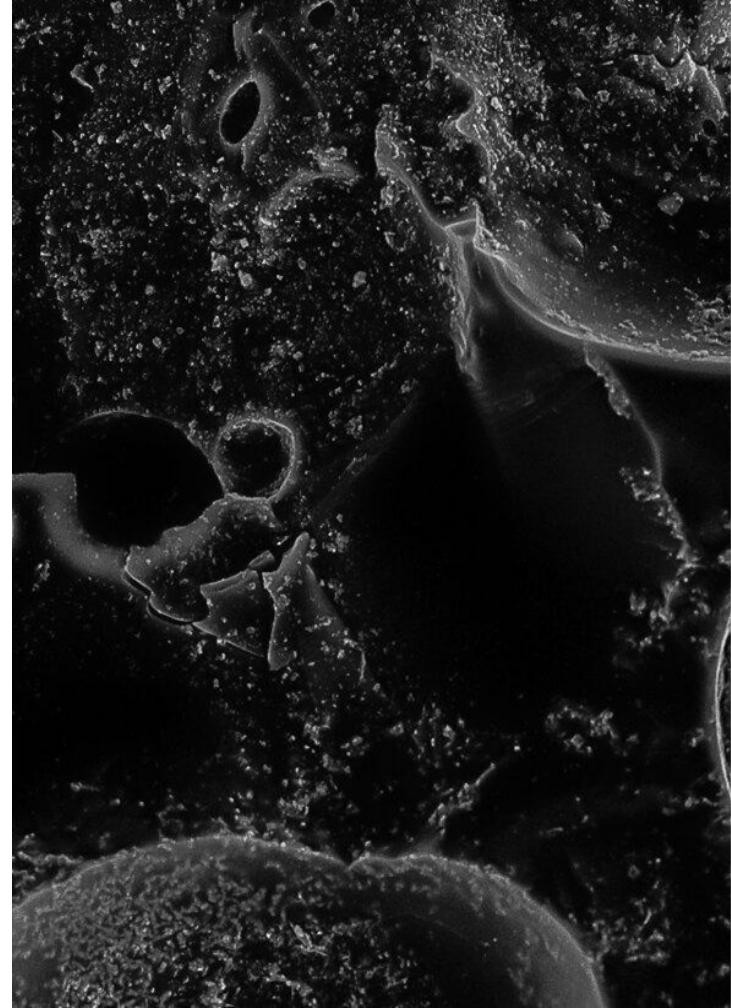
A Summary of Key Findings

1. **Governance and Accountability:** Decision-making and accountability are unclear
2. **Research Administration:** Support models and positions are inconsistent across the university
3. **Proposal Process:** Distributed authority creates inefficiency and risk
4. **Research Strategy:** No clear framework for priorities or research units
5. **Finance and ICR:** Limited transparency into research activity and funding flows
6. **Commercialization:** Expectations exceed current structure and resources

These challenges are interconnected and rooted in *system design*

Organizational Restructure

- Aligning our team structure to better match responsibilities
- Adding staff and new units in reporting lines responsible for key areas in the research life cycle to reduce friction
- Decision making authority will be moved to leaders within reporting lines
- Clearer processes and workflow





Phase II Project with Huron Consulting Group

Partnering for Scale: We have engaged Huron in a Phase II project to provide ongoing implementation guidance and scale university execution efforts.

Day-to-Day Execution: Huron supports the VCRI leadership team and helps coordinate day-to-day execution and tracks overall progress against milestones.

Activation Team Support: While most of the activation teams are driven directly by NC State ORI leadership, a few are being co-designed and informed by Huron's consulting team to leverage national best practices:

- Design of the integrated Office of Sponsored Programs operating model
- Hypercare Support Team pilot



New Research Awards FY27: \$162M
Compare FY26: \$130M

FutureTEX

NC State was selected to lead a 10-year Department of War effort to modernize U.S. textile manufacturing for military and domestic applications.

\$36M year 1; \$480M ceiling

Genesis Mission

NC State PIs will lead three fast-tracked Phase I projects (<\$1M each, under 1 year) leveraging AI to accelerate scientific discovery, with eligibility for future Phase II funding.

An aerial photograph of the NC State University campus, showing various academic buildings, green spaces, and parking lots. The image is used as a background for the slide.

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US Patent and Trademark Community Engagement Office

NC State was selected to host this new regional office. The office will expand IP support to underrepresented groups, veterans, and rural creators

SPEED Self-driving Lab Award

The Self-driving Platforms for Expedited Experimental co-Design (SPEED) in solution phase chemistry and materials science research initiative received a four-year, \$20 million award from the NSF to accelerate the pace of scientific discovery in chemistry and materials science.

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Major Engineering Research Center Transitions to NC State

Effective July 1, 2026, NC State assumes administrative leadership of the \$26M NSF Gen-4 TARDISS ERC from Ohio State.

NC State Research in the National News

Recent external coverage reflects the breadth, scale and relevance of our research enterprise.

WUNC NEWS

Military selects NC State to lead textile manufacturing modernization program

FutureTEX • Aug. 19

ARS TECHNICA

Data centers become “killer application” for new power transformer tech

Solid-state transformer • Aug. 24

TRIANGLE BUSINESS JOURNAL

NC State’s \$700M research engine lands big boost with patent office

USPTO office • Aug. 27

THE NEWS & OBSERVER

How fuzzy seaweed inspired NC State researchers to capture microplastics

Microplastics • Aug. 22

TEXTILE WORLD

NSF support bolsters textile innovation, NC State research

Textile Innovation Engine • Jul. 19

INTERESTING ENGINEERING

New soft robot uses infrared light to power continuous self-resetting jumps

Soft robotics • Aug. 31

Growing research momentum is translating into broader external visibility and national relevance.



Research Works

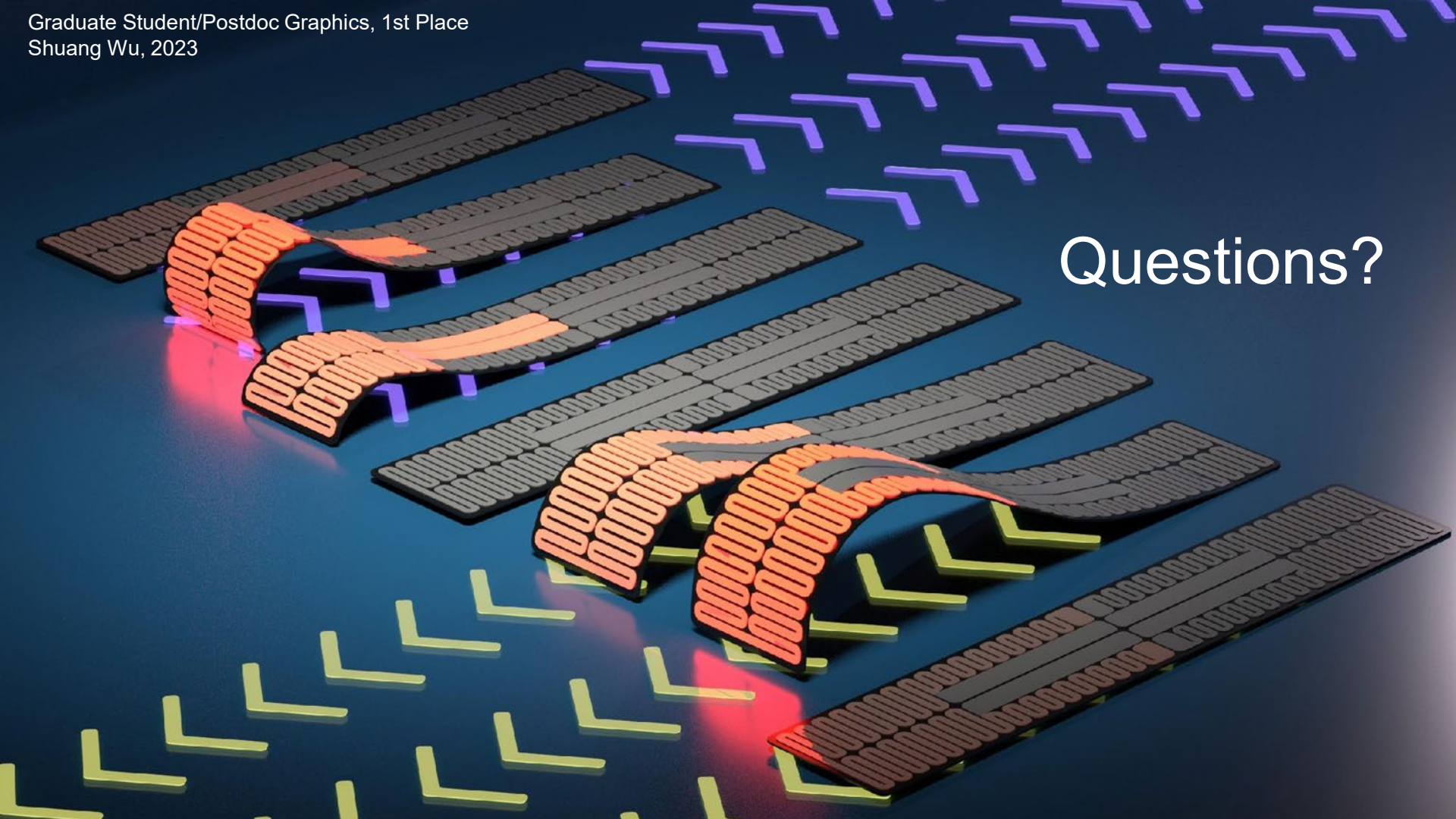
At NC State, we put research discoveries to work for all North Carolinians — and communities in need worldwide.

See the impact of our innovation at
research.ncsu.edu/research-works



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Questions?