

### MEETING OF THE BOARD OF GOVERNORS Committee on Strategic Initiatives

May 22, 2024 at 3:00 p.m.
Via Videoconference and PBS North Carolina Livestream
UNC System Office
223 S. West Street, Board Room
Raleigh, North Carolina

#### **AGENDA**

OPEN	SESSION
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A-1.	Approval of the Open Session Minutes of September 13, 2023Mark Holton
A-2.	The Impact of Artificial Intelligence on Higher Education
	Stan Ahalt, University of North Carolina at Chapel Hill Rachel Levy, North Carolina State University

A-3. Adjourn

#### **DRAFT MINUTES**

September 13, 2023 at 3:30 p.m. Via Videoconference and PBS North Carolina Livestream UNC System Office 223 S. West Street, 1809 Raleigh, North Carolina

This meeting of the Committee on Strategic Initiatives was presided over by Chair Mark Holton. The following committee members, constituting a quorum, were also present in person or by phone: Joel Ford, Carolyn Coward, John Fraley, Gene Davis, Swadesh Chatterjee, Estefany Gordillo-Rivas.

Chancellors participating were Sheri Everts and Brian Cole.

Staff members present included Andrew Kelly and others from the UNC System Office.

#### 1. Call to Order and Approval of OPEN Session Minutes (Item A-1)

The chair called the meeting to order at 3:30 p.m. on Wednesday, September 13, 2023. The open session minutes from the April 19, 2023, meeting were approved by unanimous consent.

#### 2. Strategic Initiatives Annual Agenda (Item A-2)

Chair Holton introduced the agenda for the Strategic Initiatives committee for the 2023-24 year. The agenda outlines the topics for the year to come and highlights the goals the committee plans to accomplish.

#### 3. Return on Investment (Item A-3)

Dr. Andrew Kelly gave an overview of the return on investment study that was conducted, and an update on the progress status. He then introduced the Deloitte staff in attendance, Pete Fritz and Lynnette McLaughlin, who gave a presentation of the preliminary report of the study.

There being no further business and without objection, the meeting adjourned at 4:35 p.m.

 Carolyn Coward, Secretary

#### **DRAFT MINUTES**

April 17, 2024 at 2:30 p.m.
Via Videoconference and PBS North Carolina Livestream
A.C. Ewing Performance Place, Catawba Theatre
Winston-Salem, North Carolina

This meeting of the Committee on Educational Planning, Policies, and Programs and the Committee on Strategic Initiatives was presided over by Chair Kirk Bradley and Chair Mark Holton. The following committee members for the Committee on Educational Planning, Policies, and Programs, constituting a quorum, were also present in person or by phone: Lee Barnes, Gene Davis, Estefany Gordillo-Rivas, Wendy Murphy, Art Pope, and Woody White. The following committee members for the Committee on Strategic Initiatives, constituting a quorum, were also present in person or by phone: Swadesh Chatterjee, Carolyn Coward, Gene Davis, Joel Ford, John Fraley, and Estefany Gordillo-Rivas.

Chancellors participating were Robin Cummings, Sheri Everts, Franklin Gilliam, Philip Rogers, Kimberly Van Noort, and Aswani Volety. Wade Maki, chair of the UNC Faculty Assembly, was also in attendance.

Staff members present included Andrew Kelly, David English, and others from the UNC System Office.

#### 1. Call to Order and Approval of OPEN Session Minutes (Item A-1)

The chair called the meeting to order at 2:30 p.m. on Wednesday, April 17, 2024. The open session minutes from the February 28, 2024, meeting were approved by unanimous consent.

2. Proposed Revision to Section 400.1 of the UNC Policy Manual, *Policy on Academic Program Planning* (Item A-2)

Chair Bradley gave a brief overview and recap of the progress made thus far. He then introduced Mr. Dan Harrison of the System Office, who presented a breakdown of the proposed changes to Section 400.1 UNC Policy Manual.

**MOTION:** Resolved, that the Committee on Educational Planning, Policies, and Programs approve Item A-2 and recommend it to the full Board of Governors for a vote through the consent agenda at the next meeting.

Motion: Gene Davis
Motion carried

3. Implementation Update on Return on Investment (Item A-3)

Assembly, and called on Dr. Kelly to give an overview of the draft letter and take any questions or feedback fror the committee.		
There being no further business and without objection, the meeting ad	journed at 3:13 p.m.	
	Art Pope, Secretary	
	Carolyn Coward, Secretary	

Chair Holton introduced the draft transmittal letter that will be submitted to the North Carolina General



### MEETING OF THE BOARD OF GOVERNORS Committee on Strategic Initiatives May 22, 2024

#### **AGENDA ITEM**

A-2. The Impact of Artificial Intelligence on Higher Education .......Kyle Bowen, Arizona State University
Stan Ahalt, University of North Carolina at Chapel Hill
Rachel Levy, North Carolina State University

Situation: The Committee on Strategic Initiatives will hear a presentation on the various ways

artificial intelligence may affect teaching, learning, and student success efforts within academic institutions. A panel discussion with UNC System representatives will follow

the presentation.

Background: Rapid advances in generative artificial intelligence (AI) have generated both bold

predictions about the potential applications to higher education and fears of what the new technology might mean for student learning and assessment. Some see AI as a tool to help facilitate student learning and critical thinking — akin to the introduction of the calculator in math instruction or the abundance of information made available to students with the advent of the internet. Others fret over the possibility that access to powerful large language models will enable students to complete written assignments with little more than a short prompt and the click of a mouse. Still others are concerned

about the threat AI poses to intellectual property and campus safety.

**Assessment:** Over the past year, academic leaders on and across our campuses have worked to put

appropriate artificial intelligence safeguards in place while recognizing that strict limits on the use of AI will be difficult to enforce with democratized access to these new tools. However, in the absence of coordination, policies and practices may vary across campuses in confusing and contradictory ways. While some variation is natural, coordination on key issues and risks will be critical to ensuring that the ground rules for

students, faculty, and staff are consistent.

Kyle Bowen, deputy chief information officer at Arizona State University, will provide an overview of artificial intelligence in higher education, and then UNC System representatives will share how they are considering artificial intelligence on their campuses and how they are preparing students for future careers in an AI-enhanced world. The additional materials will be available in hard copy on the day of the meeting

and via BoardEffect at the conclusion of the meeting.

**Action:** This item is for discussion only.

### AI at Carolina

## UNC System Board of Governors Committee on Strategic Initiatives

Stan Ahalt

Dean, School of Data Science and Society



Responsibly incorporating AI technology in all aspects of our institutions

People will know that North Carolina is where Al is important and welcomed.



### Success looks like:



Future-proofing our workforce



Contributing to the science of Al



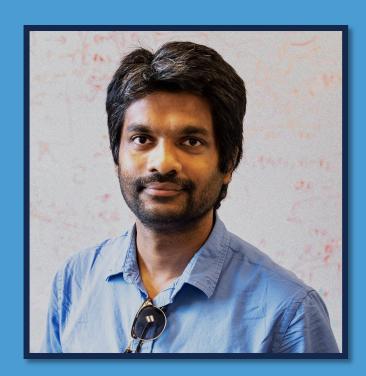
Recruiting more Al companies and jobs



### AI Expertise and Applications



Jeff Stringer School of Medicine and Gillings School of Global Public Health



Mohit Bansal
Dept. of Computer Science,
College of Arts and Sciences



Alex Tropsha
Eshelman School of Pharmacy

School of Data Science and Society is a

HUB 🛞



Chancellor's
Generative
AI Working
Group







### **NC STATE** UNIVERSITY

## Data Science and AI @ NC State: Preparing North Carolina for Success

Dr. Rachel Levy (Ray)

**Executive Director, Data Science Academy** 

Professor of Mathematics

### NC State is a Data Science and AI University

- Data Science Academy (DSA) is the first interdisciplinary academy established at NC State.
- DSA connects to all colleges and the three pillars of NC State's land-grant mission: education, research and service to the state of North Carolina.
- NC State has been a leader in statistics and datadriven science for decades.

At NC State, Data Science and Al are for Everyone.



**NC STATE UNIVERSITY** 

## Teaching and Learning: Flexible Pathways to Credentials





- We are building flexible pathways to credentials in data science and AI for every student in every major.
- Students can choose their level of data science and Al credential in every college:
  - Badges

Certificates

Majors

Major concentrations

- Minors
- Course formats include in-person, online and hybrid.

## We Teach Data Science and Al the Way Industry Trains

# All-campus Data science through Accessible Project-based Teaching and learning model

- Project-based classes
- Taught by faculty and industry experts
- On-ramps and challenges for all levels
- Courses built into credentials all over campus and beyond

### Released Teaching Guidance in Summer 2023 to Support Faculty

- Focus on using tools, not prohibiting them.
- Guide AI to document what you did and with what tool.
- Al is sparking innovation in teaching and learning.
  - What is important for students to do?
  - How can education stay workforce relevant?
- We have an excellent digital education team supporting in-person, hybrid and online learning.



## NC State Leads by Advising Data Science and AI Education Implementation



**NC State:** University-wide advisory group on education, research and business uses of AI.



**State K-12:** NC State team collaborated with NC Department of Public Instruction (NC DPI) to revise data science standards for career and technical education course.



**State Higher Ed:** NC State faculty co-led UNC System-wide professional learning group with task forces on AI in higher education.



**National:** Faculty serving on task forces to develop standards for data science and AI education in K-12 and undergraduate programs.

### **Future of Work: Industry Partnerships**











- Industry and academic networking at regular
   Al @ NC State events open to the public
- Focus on human-machine teaming
- IBM and Red Hat future of work conversations:
  - Tim Humphrey (Electrical Engineering, '96) NC State BOT member and IBM Chief Data Officer
  - Sherard Griffin (Computer Science, '03) Director of Al Services in Red Hat Engineering

## Data and AI at Work: Continuing and Executive Education

We upskill North Carolina beyond campus:

- **Extension agents** completed a three-day course on free yield, satellite and weather data to inform farmer decisions.
- **NC DHHS** completed four courses to upskill in Excel and Power BI including work-related capstone projects.
- Military leadership in conversation about datadriven decision making.



### **Accelerating Discovery: Al in Research**





- More than 100 faculty across all 10 colleges are using AI in their research including sensors, cybersecurity, bioinformatics, robotics and automation, and material discovery.
- The new Integrative Sciences Building will bring cutting-edge AI and automation experiential learning to students.
- Our libraries have data spaces and graduate student consultants that support data analytics and communication.

## Partnering Students with Businesses to Build AI Products



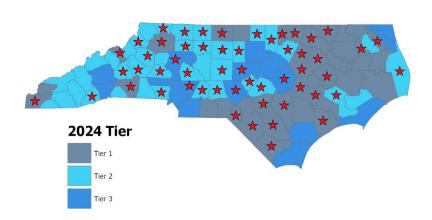


United States Department of Agriculture National Institute of Food and Agriculture

- New USDA grant pairs students with five agriculture businesses to build Al products.
- Projects will become open source AI and agriculture teaching modules.

<u>PI</u>: BE Jin. <u>Co-PIs</u>: DS Jones, K McKee, EA Hopfer, M Blevins. *Enhancing Entrepreneurial Competencies via 4 Industrial Revolution Technologies and Innovative Business Model: Ecosystem Approach (4IR and IBM)*. (01/01/2024- 12/31/2027). USDA NIFA Higher Education Grant. **\$300,000** 

## Rural Works! Data and AI Literacy Through Service and Work-based Learning



54 out of the 100 counties in North Carolina have a Rural Works! intern working there in Summer 2024.

- Rural Works! is a long-running program in the Career Development Center.
- Supported by SECU and provides summer internships to students from all majors with rural employers across the state.
- Students did mini data projects, which helped a veterans' group save \$9K on taxes.
- Planned expansion to high school students.

### **Thank You**