



POWERING THE ECONOMY

THROUGH A STRONG INFRASTRUCTURE AND WORKFORCE

Since its founding in 1789, UNC-Chapel Hill has served as an engine to drive North Carolina's economy. Over two hundred years later, Carolina continues to invest in critical infrastructure to grow and attract new industries to the state and generate the workforce needed to staff them.

NEW SCHOOL FOR DATA SCIENCE & SOCIETY

Recent announcements by Google and Apple to locate major operations within the state will create great demand on its workforce of data scientists, software engineers, and machine learning and AI innovators. To support the needs of our data-intensive industries, the university will establish the new **UNC School for Data Science and Society** in the fall of 2022.

UNC's Data Science School will foster the region's next generation of data science leaders. Beyond teaching the elements of managing and interpreting data, it will train students to apply data science to solve complex problems that achieve public good. Built on a cross-cutting model, the new school will feature faculty with joint appointments in other schools to ensure the

expertise required to apply data science skills. Both graduate and undergraduate programs will be offered, as will training opportunities for campus and industry partners.

TAPPING DIGITAL HEALTH'S BUSINESS POTENTIAL

The oceans of data generated by today's digital society, especially within the health care industry, offer transformative business opportunities.

A case in point – the unique collaboration of **Dr. Eric Weimer** in the UNC School of Medicine and **Katherine Newhall, PhD** in the UNC College of Arts & Sciences' Department of Mathematics. Their work intersected after Weimer, an organ transplant specialist, wondered if mathematical modeling could enhance the precision of matching patients in need of organ transplants to donated organs compatible with their immune systems.

Enhancing a process that had previously been conducted in labs using tests and the best judgment of doctors, the two collaborated on a predictive mathematical model to better

refine compatibility determinations. Ultimately, they enlisted experts from Microsoft to develop a machine learning process that trains computers to amplify the accuracy of these multifaceted risk assessments.

Weimer and Newhall's process was supported by UNC's **Digital Health Venture Studio**, a novel program which rapidly advances promising digital health technologies. The team completed an intensive and competitive venture development process that culminated with **Epulate**, a startup currently pursuing venture capital for an AI model and workflow tool that taps a national database and helps match patients to immunologically compatible donor organs.

NEW INNOVATION AND ENTREPRENEURIAL SPACES

Since the late 1950s, UNC-Chapel Hill has launched over 844 new businesses for the State of North Carolina, creating over 89,000 jobs. Building on that legacy, Chancellor Kevin Guskiewicz has committed the university to a new chapter of catalyzing regional economic growth.

An **innovation district** in downtown Chapel Hill is sparking business and industry growth along the Franklin and Rosemary Street corridor. A central feature of the plan is a 20,000-square-foot **UNC Innovation Hub** housed within a newly renovated Grubb Properties commercial building across the street from campus. The Grubb building will feature wet labs to provide much needed co-working space for UNC life sciences startup ventures. **BioLabs North Carolina** will be one of the first tenants. Announced last fall, BioLabs and the university are developing a strategic partnership to increase the number of startups established through UNC-Chapel Hill faculty research.

NC INVESTMENTS IN ANTIVIRAL RESEARCH PAY OFF

Carolina's status as a top-ranked global research institution for virology and infectious disease is paying major dividends for the state of North Carolina. UNC's **Rapidly Emerging Antiviral Drug Development Initiative (READDI)** links the university's virology experts with researchers and industries worldwide. Founded with internal seed funding from the **UNC Vice Chancellor for Research**, and supported by the **Eshelman Innovation Institute**, READDI has attracted funding from **RTI International**, the **NC General Assembly** and

NC Collaboratory. These investments recently paid off for North Carolina in the form of a \$65 million award from **NIH** to establish a new **Antiviral Drug Discovery Center** at UNC. While READDI is built solidly on the back of UNC's scientific expertise, it has been developed with a critical eye to the role it can play in regional economic development – creating opportunities for other North Carolina research universities and for industry.

PARTNERSHIP WITH COMMUNITY COLLEGES

As part of a commitment to forge new connections to North Carolina's community colleges, UNC has partnered with **Central Carolina Community College** to help launch **NEXT LEVEL**, a new comprehensive business startup program funded by **NC IDEA** that targets entrepreneurs building scalable businesses with potential national or worldwide reach. The **CCCC Small Business Center** and **Innovate Carolina** will work together to develop programming for these prospective high-growth business owners.



The **UNC Innovation Hub**, located in the heart of Chapel Hill, is home to **Innovate Carolina**, the university's launch pad for innovation and entrepreneurship.

To partner with us or to join our growing footprint of innovation space, please visit innovationhub.unc.edu.



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