

Powering the Sciences at NC State

NC STATE
UNIVERSITY

Integrative Sciences Building



From the Chancellor

NC State was founded to broaden access to outstanding higher education, prepare experts in scientific, agricultural and technical fields, and conduct research that solves problems. For more than a century, as the world has changed, our university has constantly transformed to serve its constituents by creating economic, societal and intellectual prosperity.

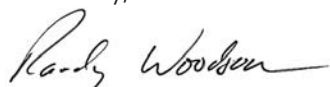
Over the past decade, we have become a recognized leader in interdisciplinary approaches — working across departments and even colleges to meet today's challenges and empower tomorrow's leaders. Our interdisciplinary transformation has included opening the Plant Sciences Building and the College of Engineering's Fitts-Woolard Hall, both on NC State's Centennial Campus. These facilities provide the infrastructure for innovation and collaboration that can change the world.

The Integrative Sciences Building (ISB), slated to open in fall 2026, represents the next step in that evolution. This facility, and the Integrative Sciences Initiative it houses, will be a catalyst for revolutionizing the sciences at NC State. The ISB will provide much-needed flexible space for a robust academic and research program in the STEM disciplines, embracing fields including chemical engineering, molecular biology, biochemistry and chemistry while facilitating the creation of new models for teaching. It will inspire creativity, increase knowledge transfer and help us engage more deeply with industry partners to enhance our curriculum and shape workforce development. In the ISB, chemists, biologists, engineers and veterinary medicine experts will work together, just as they do in the world beyond campus. In its location at the former Harrelson Hall site on the Brickyard, the ISB also will serve as an exciting new crossroads for connectivity and revitalization at the heart of NC State's campus.

Molecular-focused discovery and education hold tremendous potential to advance human and animal health, agriculture, sustainability and daily life. We have a deep reservoir of foundational faculty strength to build upon, but our decades-old buildings simply have not kept up in terms of demand, design or equipment. NC State's world-leading researchers and educators need extraordinary facilities in order to make the life-changing discoveries that will drive the future.

NC State is on an upward trajectory. Our institution has never been more important to our state, nation and world, as evidenced by the General Assembly's \$90 million commitment to the ISB. I invite you to learn more about how you can make a difference for this project, and how your investment in the Integrative Sciences Building will solidify our legacy — and our future — as a STEM pacesetter and powerhouse.

Sincerely,



W. Randolph Woodson | Chancellor

Integrative Sciences Building: Fostering Cross-Campus Collaboration at NC State



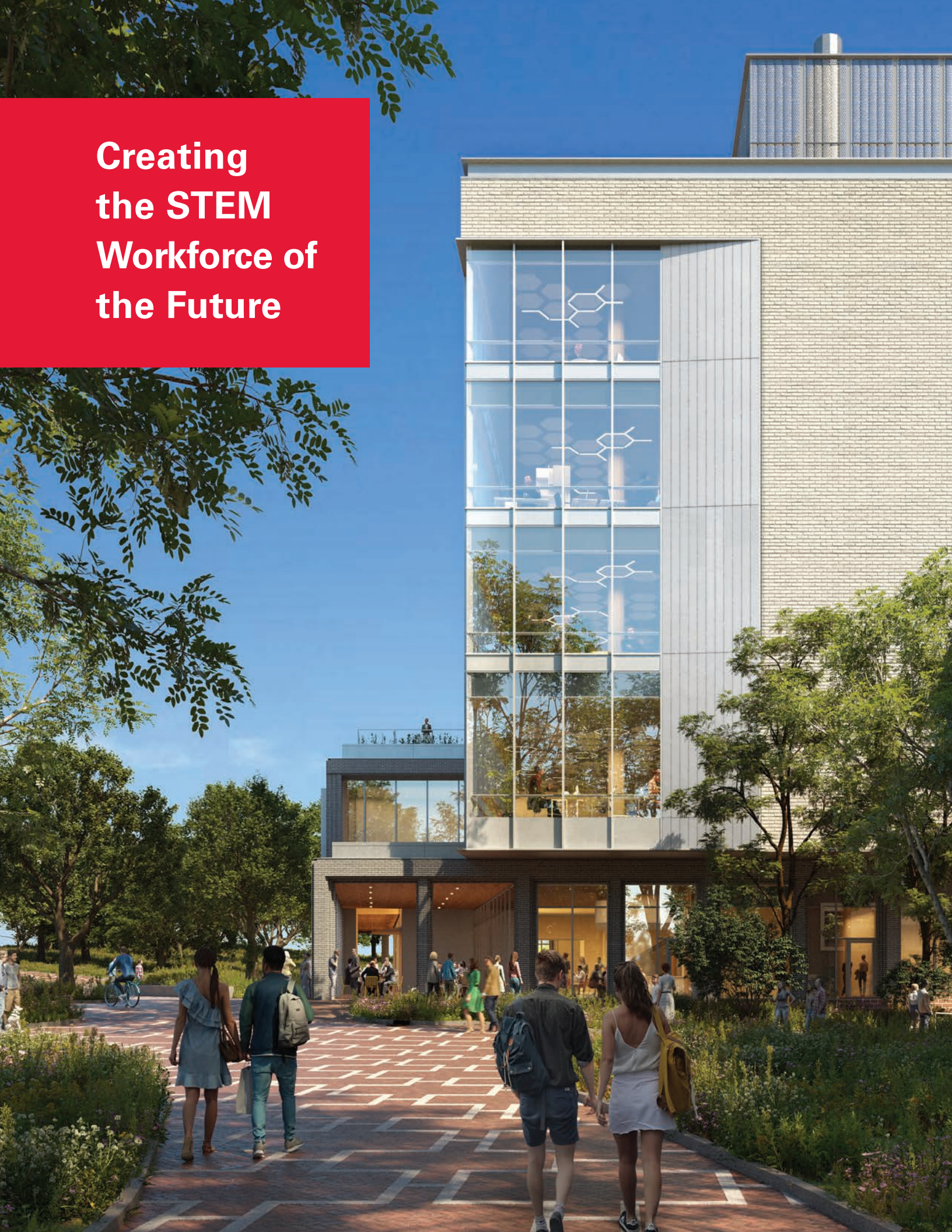
In the 21st century, the biggest discoveries in the sciences — and the most significant practical innovations — require different disciplines to work together. NC State is leading the way in this integration with the new Integrative Sciences Building (ISB). This building unites chemistry, biochemistry, biology, physics, engineering and other fields in the study of the living world's core building blocks: molecules. The ISB is part of an expansive learning, research and public engagement undertaking, a campuswide effort called the Integrative Sciences Initiative.



The ISB — a joint effort of the Colleges of Agriculture and Life Sciences, Engineering, Sciences and Veterinary Medicine — is a key priority for these colleges and for the university. The building will stand on the former location of Harrelson Hall, at the heart of NC State’s campus.

The ISB will facilitate new synergies in research, education and engagement to solve some of the world’s grandest challenges — like cancer, sustainability and infectious disease — and rise to meet the world’s greatest opportunities. The building will serve as the home of the initiative, which will unite the molecular sciences throughout the university.

**Creating
the STEM
Workforce of
the Future**





The Integrative Sciences Initiative and Building will equip students — undergraduates and graduates — for lifelong success through innovative education led by a community of interdisciplinary scholars. The Integrative Sciences First Year Program, housed in the building, will teach creative research and problem-solving skills and will later be developed into a multiyear curriculum with the ultimate goal of transforming the educational and research environment for NC State students.

This curriculum will include engagement with external partners,

giving students exposure to what it looks like to be a scientist in industry. By doing so, the curriculum will help students make informed decisions about which STEM area to focus their studies on. The curriculum will also flow into students' subsequent years of study, which will continue to include transformational courses. Each year, students in the integrative sciences program will be taught skills and approaches to STEM that will be crucial as they move into the workforce. Courses will also enhance students' undergraduate research experiences.



A Space for Leaders To Innovate

The ISB will be a central location for researchers from across campus to join together around shared projects that will transform the future of medicine, agriculture and daily life. The building will be a hub connecting existing centers of excellence on campus and, through additional investments, enlivening the NC State campus Brickyard, making the entire area a hive of scientific innovation and education. At the center of the ISB will be three new core labs that will greatly increase NC State's ability to create and visualize new molecules and put them to use in novel technologies.



A key feature of the building is that each of its five floors will be highly interactive, with no divide between research and teaching. The ISB will support work in three Chemistry of Life themes that focus on creating, visualizing and using molecules. Each theme embraces interdisciplinary research and teaching through the use of technology, core facilities and other shared spaces within the building. Overall, the ISB will support a collaborative research environment for

undergraduate and graduate students, faculty and staff.

The ISB will enhance NC State by advancing the university's role in the molecular sciences ecosystem. Over twenty molecular sciences-focused startup companies have already spun off from the university. Through the integrative, innovative research enabled by the ISB, that number will grow rapidly — extending NC State's positive impact on the people of North Carolina, the nation and the world.



Now Is the Time

At NC State, we have far outgrown existing space for lab based programs in chemistry, biochemistry, biology and physics, subjects that form the heart of a STEM campus. Our existing major lab science buildings date from 1926, 1960 and 1969 — all long before the development of today's molecular sciences.

The ISB will give our university the cutting-edge facility we need to advance STEM at NC State. The ISB,

and the initiative it houses, will employ the latest technology to solve major societal challenges, and in doing so, will train the interdisciplinary STEM workforce of the future.

The state of North Carolina has already provided \$90 million for the ISB — and we need to match this generous investment. We will break ground for the ISB in 2023 and push it to completion by the end of 2026. Now is the time to invest in NC State's No. 1 capital priority.

“NC State’s historic support for interdisciplinarity includes our faculty clusters, the N.C. Plant Sciences Initiative, three academies and more. With the Integrative Sciences Building and Initiative, we take the next step in breaking down barriers to solve great societal issues.”

Warwick Arden | Executive Vice Chancellor and Provost





NC State graduates
one-third of all the STEM
graduates in the UNC System



priority for capital
projects at NC State



of NC State graduates take
two or more courses in
chemistry or biochemistry



square feet of innovation



of the ISB's total cost provided
through the generosity of the
state of North Carolina



NC State is the only
university in the
UNC System to offer
biochemistry as a major





12,415

jobs created in
North Carolina by
NC State's economic
development partners
in fiscal year 2022



21

molecular sciences-focused
startup companies spun off
through NC State's Office of
Research Commercialization



1926
1960
1969

The construction years
for Polk Hall, Cox Hall and
Dabney Hall, respectively.
These NC State facilities
dedicated to scientific study
are too old to be retrofitted
to the ISB's standards,
which led university leaders
to recognize the critical
need for a new facility.

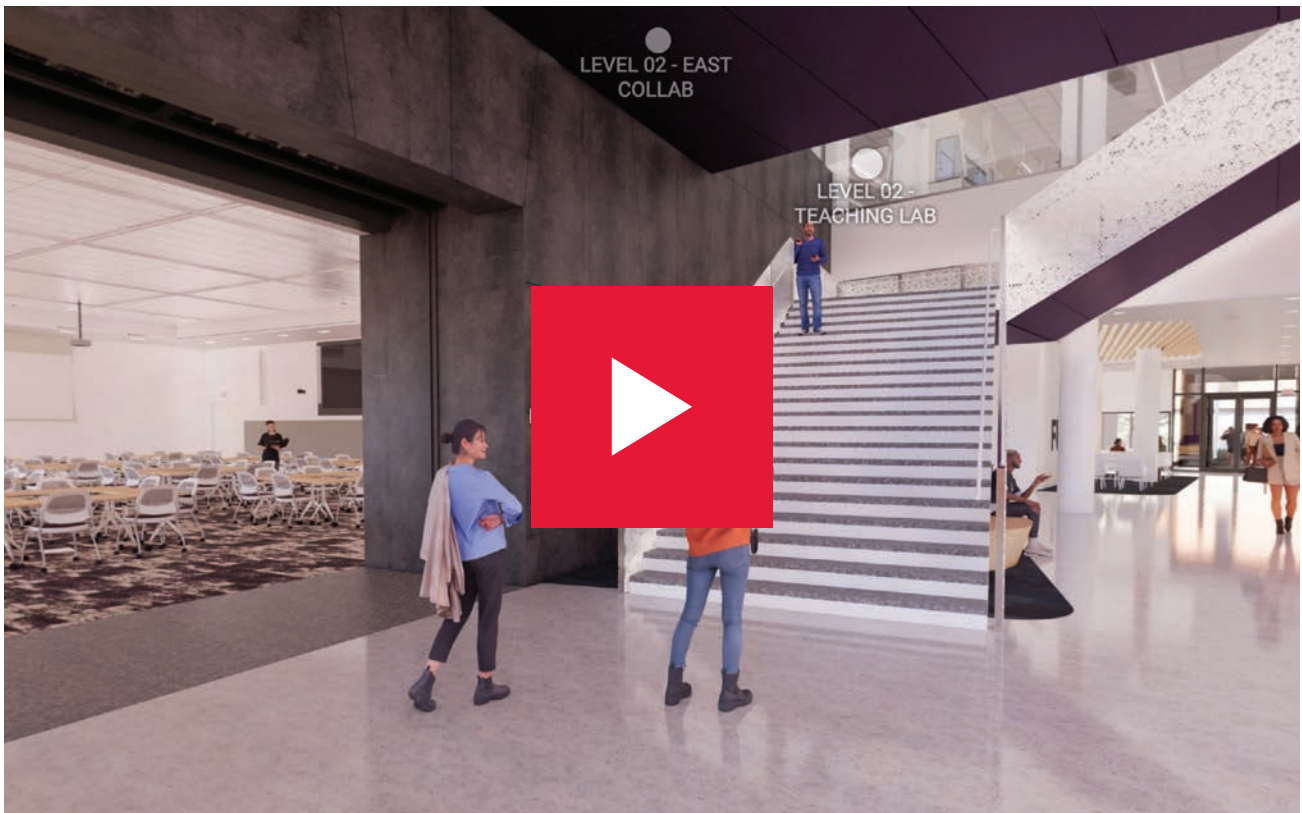


How Can You Help?

The ISB will create a transformative new space for lab-based science programs such as chemistry, biochemistry, biology, agriculture, sustainability and engineering. Coming in at five stories and more than 150,000 square feet, with event space, outdoor convening areas and a café, the building will also dramatically enhance NC State's campus.

We invite alumni, friends and supporters to learn more about this dynamic initiative and help the ISB train and educate the workforce of the future. Naming opportunities are available in the ISB.

To learn more about supporting the ISB and the future of science learning, research and public engagement at NC State, please visit go.ncsu.edu/isb-science.



Take a virtual tour of the Integrative Sciences Building.
Explore the space and discover the new home of
science and innovation at NC State.

Gifts in support of the Integrative Sciences Building, and other contributions to the Office of the Executive Vice Chancellor and Provost, are received by the North Carolina State University Foundation, Inc. The North Carolina State University Foundation supports, by financial assistance and otherwise, the various colleges within the university, the Libraries and other university-connected functions. The NC State University Foundation is recognized as a 501(c)(3) public charitable organization. Donations to the NC State University Foundation are deductible to the extent permitted by law.

NC State provides equal opportunity and affirmative action efforts, and prohibits discrimination and harassment based upon the following, which is considered by NC State to be a “protected status”: a. race; b. color; c. religion (including belief and nonbelief); d. sex, including but not limited to (i) pregnancy, childbirth or related medical condition, (ii) parenting and (iii) sexual harassment; e. sexual orientation; f. actual or perceived gender identity; g. age; h. national origin; i. disability; j. veteran status; or k. genetic information. NC State also prohibits retaliation based upon a person’s engagement in a protected activity.



**Office of the Executive
Vice Chancellor and Provost**

Campus Box 7101
North Carolina State University
20 Watauga Club Drive
Raleigh, NC 27695-7101

Phone: 919-515-7624

Fax: 919-515-5921

provost.ncsu.edu

provost-development@ncsu.edu