NC STATE

External Affairs, Partnerships and Economic Development



2023

Contents

Overview	3
Partnerships	5
Economic Development	16
Small Business and Technology Development Center (SBTDC)	21
State and Local Relations	25
Federal Affairs	36

Overview

NC State's Office of External Affairs, Partnerships and Economic Development (EAPED) works to position NC State as one of the top public research universities in the state of North Carolina and the United States. EAPED's strategic focus on building and managing relationships and economic development partnerships enhances local and global engagement, resulting in new jobs and investment for North Carolina. EAPED works with a variety of internal and external constituencies to advocate for NC State in achieving its three-tiered mission of teaching, research, and extension and engagement. The Office aligns five areas into one organizational structure: Partnerships, Economic Development, the Small Business and Technology Development Center (SBTDC), State and Local Relations and Federal Affairs.

Leadership Team

Kevin Howell | Vice Chancellor, EAPED

Julie Smith | Associate Vice Chancellor, EAPED

Mark Schmidt | Associate Vice Chancellor, Partnerships

Tom White | Director, Economic Development

Byron Hicks | Assistant Vice Chancellor and State Executive Director, SBTDC

Matt Peterson | Director, Federal Affairs

EAPED builds and maintains strong partnerships with industry, government and nonprofit organizations, including those on Centennial Campus; the Economic Development Partnership of North Carolina; NC Department of Commerce; UNC System Office and its consituent institutions; the North Carolina Community College System; United States Congress; North Carolina General Assembly; Office of the Governor; Council of State; Wake County (and other counties throughout North Carolina); City of Raleigh; and NC State faculty, staff and students.

Year in Review



126

Corporate,
Government
and Nonprofit
Partners

44%

Increase in Industry Funding (\$32M)

Managed by the Office of Partnerships



\$9.8B

Capital Investment 4,835

Jobs Created

Through Economic
Development collaborations



325

Businesses Started 5,783

Clients Served

Resulting from the SBTDC's business counseling services



\$550M

House and Senate Budget Proposals

(Still Pending)

\$72M

Increased Federal Appropriations

\$550M direct appropriations secured by State Relations

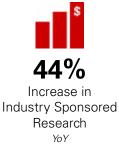
(still pending)

\$72M increased appropriations (YoY) secured by Federal Affairs

Partnerships

Highlights













In FY 2023, the Office of Partnerships supported \$32 million in industry sponsored research (44%) increase over the previous year), and \$1.8 million in directed gift funding (20% increase over the previous year). This is largely due to a 38% increase in the number of partners funding NC State research — diversifying our portfolio and increasing engagement opportunities across the board. We also led the development of two major master research agreements (MRAs) with Fujifilm Diosynth and Under Armour, and grew strategic partnerships with the Novo Nordisk Foundation and Eastman, among others. This year, the office managed 39 prospects and secured 12 new partners, resulting in a 31% conversion rate.

By building impactful university-industry partnerships, the team continues to provide unique opportunities for students and faculty. Over the last five years, Centennial Campus partners have hired more than 2,000 NC State students as interns. Currently (as of June 2023), there are 6,456 alumni employed across all of our partner companies.

The latest data from the National Science Foundation (released December 2022) ranks NC State 6th nationally for industry-funded research, among public universities without a medical school. Industry research expenditures make up 9% of NC State's total \$547 million portfolio. When comparing among key peers, Georgia Tech's industry expenditures make up 5% of its total research portfolio, 6% of Virginia Tech's, and 9% of Purdue's. The Office of Partnerships continues to work closely with the Office of Research and Innovation to strategically increase this segment of NC State's portfolio.

Partnerships

Category	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Partners	121	117	121	124	126
Prospects	39	35	40	49	39
New Partners	14	11	8	14	12
Sponsored Research Funding	\$23 million	\$24 million	\$20 million	\$22 million	\$32 million
Directed Gift Funding	\$1.2 million	\$1.2 million	\$1.7 million	\$1.5 million	\$1.8 million
Partner Employees on Centennial Campus	4,343	4,150	4,254	4,245	4,042

The majority of the 120+ partnerships we manage result in new products entering the marketplace. On average, each year the university receives 275 invention disclosures, files 90 new patents and executes 150 licenses/options. The Office of Partnerships works closely with the Office of Research Commercialization and our corporate partners to ensure each side is aligned towards bringing research discoveries to the marketplace, taking into account practical business realities. The latest nationwide analysis ranks NC State second among all U.S. public universities in research technology transfer and commercialization.

Sponsored Research				
1. USDA	\$7.9 million			
2. NOAA National Weather Service*	\$5.4 million			
3. Laboratory for Analytic Sciences (LAS)	\$4.8 million			
4. NC Wildlife Resources Commission	\$3.4 million			
5. Eastman	\$2.7 million			
TOTAL FY 2023 Sponsored Research: \$32 million				

^{*}For historical consistency, this number is a reflection of NOAA's total funding across all departments, the majority of which comes from the North Carolina Sea Grant College Program.

Directed Gifts				
1. Probelte	\$639,366			
2. Bayer Crop Science	\$328,384			
3. Eastman	\$150,200			
4. John Deere	\$105,480			
5. Eaton	\$99,000			
TOTAL FY 2023 Directed Gifts: \$1.8 million				

Below are a few of the interdisciplinary funding opportunities managed by the Office of Partnerships.

USDA: USDA invested \$7.9 million in NC State research across the Colleges of Natural Resources, Veterinary Medicine, and Agriculture and Life Sciences. The funding (\$1.2 million increase over the previous year) is focused on new research projects in geospatial analytics and precision agriculture, in addition to continued work with the Center for Integrated Pest Management (CIPM). For example, USDA collaborated with NC State researchers to develop a mapping tool for improved field operations and crop planning.

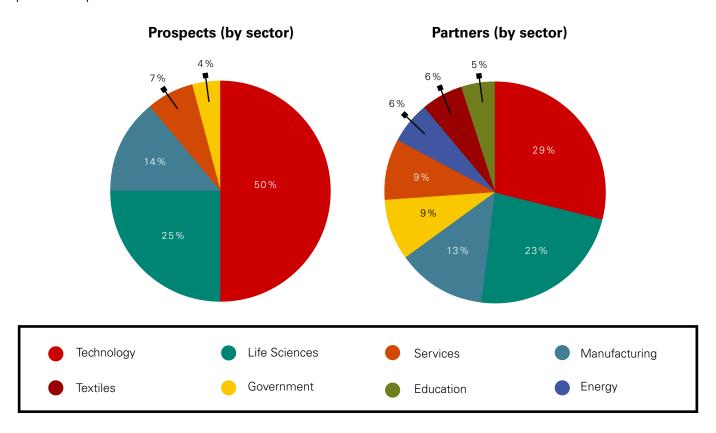
LAS: LAS issues an annual call for proposals where tailored responses are submitted by NC State researchers, university collaborators and corporate partners. This year, LAS distributed a total of \$4.8 million to NC State.

Eastman: This year, Eastman sponsored \$2.7 million in research projects (\$1 million increase over the previous year). The largest funded project is a collaboration with the Department of Chemical and Biomolecular Engineering to accelerate the R&D of new specialty chemicals. The funding is being used to develop a fully autonomous lab in Engineering Building I — equipped with stateof-the-art technology integrating artificial intelligence (AI) and robotics. Additional projects funded in FY 2023 include Eastman's first-ever project with the College of Veterinary Medicine, which is focused on advancing antimicrobial properties.

Novo Nordisk Foundation: In the first full year of the Office of Partnerships leading the Novo Nordisk Foundation partnership, NNF chose NC State to lead the Biocatalyst Interactions with Gases (BIG) Collaboration, funded at \$6.6 million. NC State received \$1.3 million in the first year of the project (FY 2023), and will receive approximately the same amount annually over the next five years. University researchers are developing global solutions for CO2 management and sustainable fertilizer production.

Partnerships

Consistent with FY 2022, FY 2023 activity was strongest across technology and life sciences sectors. Technology-based companies, mainly focused on data analytics and computer science, continue to represent the largest portion of both prospects and partners. In this year's prospect pipeline, we saw an uptick in the percentage of technology companies (17% higher over the previous year). In addition, of the new partners secured in FY 2023, we saw a slight increase in life sciences and manufacturing companies — 5% and 4%, respectively. These trends align with the region's target industries for economic development, growing momentum for mutually beneficial partnerships.



Building Strategic Partnerships

The Office of Partnerships works alongside more than <u>120 partners</u> — ranging from early-stage startups to large enterprises listed on Forbes' Global 1000 — to make the process of doing business with NC State as easy and effective as possible. This requires our staff to provide the agility, speed and responsiveness industry collaborators expect.

While the data reveals significant contributions in areas like research funding, the impact of the Office of Partnerships is represented by more than quantitative metrics. Below are just a few examples of how we serve as a catalyst for developing effective university-industry partnerships.



Under Armour

This year, <u>Under Armour opened an innovation center</u> on Centennial Campus, after signing a lease last year, and signed a master research agreement with NC State. From its new facility, the company is collaborating with faculty and students across the Wilson College of Textiles, Nonwovens Institute and College of Design to innovate cutting-edge fabrics. Under Armour is investing more than \$1 million in NC State research, with plans to expand that commitment annually.

The company is working with NC State to advance innovation in product design and sustainable apparel. Under Armour is primarily working with the Nonwovens Institute to commercialize research and sponsoring senior design projects in the Wilson College of Textiles, as well as conducting testing in order to improve fabric performance and endurance.

Novo Nordisk Foundation

In November 2022, NC State announced a new collaboration with the Novo Nordisk Foundation (NNF). The \$6.6 million BIG Collaboration is developing new technologies to advance global sustainability solutions. NNF has now invested more than \$60 million in NC State research.

As NNF's dedicated liaison to the university, the Office of Partnerships continues to strengthen and grow the partnership. We convened a faculty team to develop transformational interdisciplinary research ideas (in alignment with NNF's 2030 strategy). NC State sees future opportunities related to the Plant Sciences Initiative, BTEC 2.0, Business Sustainability Roundtable and Sustainable Advanced Biomanufacturing (as a university-wide research focus).

In May 2023, Chancellor Woodson, Mark Schmidt and CALS leadership visited Denmark to meet with NNF's CEO and leadership team. The visit also included sessions with Danish Technical University (DTU) — NC State's primary university partner on NNF-funded collaborations. The trip

was a success, with several takeaways around strategically growing the relationship and securing large-scale funding opportunities. As a result, NNF's CEO is planning a visit to NC State this year.

Eastman

This year we <u>celebrated 10 years</u> of the partnership with Eastman. In FY 2023 Eastman invested \$2.7 million in research, bringing their total investment to more than \$20 million. They have now funded 114 projects across 7 colleges and hired more than 100 students. Eastman estimates a business ROI of \$220 million, which includes reduced production costs, adding value to and protecting high-margin products, opening doors to potential customers, and informing future business decisions around digitization and decarbonization.

To mark the partnership's decade milestone, Eastman executives visited NC State including a meeting with Chancellor Woodson. Joint discussions served to lay the groundwork for expanding the partnership into the future.



Fujifilm Diosynth Biotechnologies

NC State also <u>expanded its partnership with Fujifilm Diosynth</u>. In November 2022, the university and company co-signed a five-year master research agreement. The growing partnership builds on existing collaborations with the College of Design and the Golden LEAF Biomanufacturing Training and Education Center (BTEC). In the year ahead, the partnership aims to innovate manufacturing processes focused on water, energy and materials.

In addition, with the Greater Raleigh Chamber of Commerce, NC State and Fujifilm Diosynth colaunched the Business Sustainability Roundtable (BSR) — a program to advance North Carolina business sustainability leadership. Credit Suisse, Duke Energy, John Deere, SAS and Wake County join us as founding members in this strategic initiative. The BSR officially kicked off this spring at the Raleigh Chamber's Sustainability Conference, which featured a keynote address from EPA Administrator Michael Regan.

Telling Our Story

Partnership Portal

Our <u>Partnership Portal</u> website, a hub for connecting industry partners with NC State assets, generated 19,340 views in FY 2023 — a 13% improvement over the previous year. Using the portal's custom tool, we continue to promote new industry opportunities to faculty. This allows us to share funding opportunities with more than 200 researchers across 10 colleges. This year we posted 19 opportunities from companies including Amazon, BASF, Cisco and Delta Airlines, among others. The postings received a high open rate of 71% — a 16% improvement over the previous year.

Here is one recent example of the portal's impact. In April 2023, Department of Computer Science Assistant Professor Xiaorui Liu received an Amazon Research Award after responding to one of our postings. The funding from Amazon supports his research project, 'Deep Reinforcement Learning' for the Mixed Ranking of Recommendations and Advertisements with Page-wise Display' in the Prime Video category.

The portal's Search Engine Optimization (SEO) strategy also continued to yield results, generating 12 new leads in FY 2023. Half of these leads were converted to active prospects — for example, Artificial Inc. and Sherwin-Williams.

Success Stories

Market research indicates that partner testimonials are the best way to recruit new prospects. In FY 2023 we developed 12 articles profiling our partnerships with Eastman, Fujifilm Diosynth and Under Armour, among others. These stories live on our Case Studies page and were promoted on social media, via email and featured on the NC State and Centennial Campus websites.

Continued focus was also given to earned media coverage. We pitched and coordinated 16 stories in local and national outlets, which yielded more than 3 million positive impressions (based on estimated viewership of each publication). A few examples include:

- Axios: New NC State project aims to make fertilizer production greener
- Baltimore Sun: Under Armour will invest \$1 million in textile research at NC State
- News & Observer: In search of the next SAS, Triangle investor donates \$900k to NC State

Advancing Centennial Campus



September 9, 2022: German 3D printing company Rapid Shape selected Centennial Campus for its North American headquarters.

More than half of the partnerships managed by the Office of Partnerships are based on Centennial Campus. We work closely with each corporate, government and nonprofit partner to connect them with university resources to help solve their business challenges.

We also work jointly with the Office of Real Estate to anticipate current and future demand for innovation space and amenities on Centennial. Regular meetings are held between our offices as we work together to shape the strategy for the planned innovation district. In FY 2023, we initiated marketing for the innovation district's first building. This includes a <u>dedicated landing page</u> about the development.

The Office of Partnerships recruited several new partners to campus this year, including Bayer Crop Science, Climavision, Linxon, Oerth Bio, Rapid Shape and Under Armour. All of these companies have worked with our office to identify engagement opportunities with faculty and students.

Digital Marketing

In FY 2023, the Centennial Campus website generated 32,507 visitors with 55,856 pageviews. The <u>Lake Raleigh landing page</u>, which promotes the outdoor and recreation spaces on Centennial, continues as the most popular page on the site, followed by the Visit page and Live and Work page.

Our <u>Centennial Campus jobs tool</u> integrates with ePACK and offers additional functionality for our partners to showcase opportunities to NC State students and alumni. This year we promoted 20 opportunities, including full-time positions with Collaborations Pharmaceuticals, Eastman, Hitachi and Spotit, receiving 1,428 views. And our <u>partner benefits toolkit</u>, which is shared with new partners as well as new hires of existing partner companies, received 1,552 views.

Additional Select Initiatives

Recruitment Projects

In FY 2023, the Office of Partnerships continued to work closely with economic development partners to recruit companies that align with NC State's strengths. For example, we have been actively engaged with several companies who recently announced plans to locate in North Carolina. In October 2022, GE Hitachi announced the creation of 500 jobs to build a nuclear energy facility near Wilmington. The company has spun off a new division focused on green energy, called GE Vernova. GE Hitachi is interested in expanding the relationship with NC State Nuclear Engineering to create a strategic partnership with their new division. This includes a focused approach on talent development and recruitment of NC State undergraduate and graduate students.

We also provided custom proposals and support for several projects, in collaboration with Wake County Economic Development. For example, Kempower, a manufacturer of electric vehicle chargers, announced in February 2023 the creation of 600 jobs in Durham to establish its first U.S. facility, with plans to build and operationalize a network of half a million electric vehicle chargers across the nation. Our team was highly involved in the regional recruitment project and will continue building the partnership as the new facility gets up and running.

Daugherty Endowment

Since the Daugherty Endowment was established in 2003, the Office of Partnerships has <u>led</u> <u>and coordinated the program</u> — managing expenditures, overseeing the advisory committee, and managing partnerships with investors and internal units.

The endowment seeks to increase the success of startups based on NC State intellectual property, and to promote entrepreneurship on campus. To date, \$568,000 has been awarded to more than 50 early-stage startups, 75% of which are still in business and remain in North Carolina. Those companies have gone on to raise \$58.4 million in follow-on funding.

The endowment partners with the Kenan Institute to run a Daugherty Track at the eGames, targeting newly-formed NC State spinouts. This year, \$50,000 was awarded to the top three finishers:

- Hoofprint Biome (first place) is working to help the cattle and dairy industry reach its netzero climate change goals by reducing methane.
- Vetletics (second place) is a veterinary business that has produced technologies such as the EQ Press, a recovery device for hard-working horses to keep them in great shape, reduce inflammation and promote their overall health.
- SelSym Biotech (third place) is a biotechnology startup focused on the development of therapeutics for the treatment of uncontrolled bleeding.

Team Development



Morgan High, director of marketing and communications, was awarded the Chancellor's Unit Award for Excellence, as part of NC State's annual recognition of staff service to the campus community.

This year, our team continued to build win-win collaborations and grow the office's portfolio of industry partnerships. In addition, we have recently hired for a dedicated position to manage and strategically expand the partnership with NNF.

Our team also continued engagement with the University Industry Demonstration Partnership (UIDP) and Association of University Research Parks (AURP), including speaking roles at

Partnerships

conferences, webinars, panels and thought leadership sessions. These relationships strengthen NC State's recognition as a top university for industry partnerships, as well as Centennial's role as a leading research park globally.

In FY 2023, NC State launched an internal task force to optimize corporate engagement at the university — examining how partnership opportunities are routed across each of the functions who engage with corporate partners, as well as at the college level. By improving process clarity, we can better communicate opportunities internally and externally. This will also better position NC State for the many strategic opportunities ahead — Engineering NC's Future, increased economic development activity, and future development on Centennial Campus, to name a few.

FY 2024 will present many opportunities for developing win-win partnerships. We are strengthening our focus on recruiting new strategic partners, broadening engagement with existing partners and ensuring the future advancement of Centennial Campus. Our overarching goal is to support the NC State mission through highly effective university-industry collaborations.

NC State's Economic Development Partnership works across the state to attract new businesses and industries to North Carolina, partnering closely with the N.C. Department of Commerce, the Economic Development Partnership of North Carolina (EDPNC), and local economic development organizations. The university continues to be a key driver in efforts to attract national and global industries to the state, which helped land North Carolina's recognition as America's Top State for Business by CNBC in 2022 and again in 2023.

NC State's Economic Development Partnership provides extensive data for statewide proposals, as well as identifies and engages university subject matter experts to provide tailored solutions for each project. In FY 2023, key collaborators included faculty from the Department of Electrical and Computer Engineering, Department of Industrial and Systems Engineering, Department of Food, Bioprocessing and Nutrition Science, Industry Expansion Solutions, Wilson College of Textiles, NC Japan Center, BTEC, FREEDM Systems Center, and the Clean Energy Technology Center.





Announcements

In FY 2023, NC State's Economic Development Partnership worked with statewide partners on nearly 50 recruitment projects. The unit also helped to secure several new industry announcements, resulting in capital investments totaling \$9.8 billion and the creation of 4,835 jobs. In addition, the office contributed significantly to helping recruit advanced manufacturing clients to North Carolina's multiple megasites.

Project Hibernian (Wolfspeed): Celebrating its North Carolina roots, in September 2022 Wolfspeed announced its plans to locate the world's largest silicon carbide materials manufacturing facility in Chatham County (Siler City/Chatham County megasite), investing \$5



Former Wolfspeed CTO John Palmour was one of NC State's remarkable alumni — 35 years ago he and fellow graduate students were the first to commercialize silicon carbide materials, founding the company that is today Wolfspeed.

billion and bringing more than 1,800 high-paying jobs. NC State worked closely with the N.C. Department of Commerce, EDPNC and Chatham County economic developers throughout the recruitment. University researchers from the Department of Electrical and Computer Engineering and Nanofabrication Facility were also brought in to present to the company on numerous occasions.

- Project Darwin (Toyota): The original announcement in December 2021 included a \$1.3 billion capital investment along with 1,750 jobs at the Liberty/Randolph County megasite. In FY 2023, NC State continued to collaborate on the project, which helped secure an additional \$2.1 billion investment. Because of this expansion, the project now totals \$5.9 billion capital investment along with 2,100 jobs. Working closely with EDPNC and the Greensboro Chamber of Commerce, NC State subject matter experts presented to Toyota executives along with the company's site selection consultants, and the university provided significant data and background information promoting NC State's strengths. In FY 2023, NC State identified faculty experts from the Department of Industrial and Systems Engineering, Center for Additive Manufacturing and Logistics (CAMAL) and NC Japan Center to further aid in the expansion.
- Project Cascade (Believer Meats): Believer Meats, an Israel-based company that manufactures a cell culture based meat substitute, announced December 2022 a \$123 million capital investment along with 100 jobs in Wilson County. NC State was heavily engaged throughout the recruitment, including creating strategic collaborations with BTEC and the Department of Food, Bioprocessing and Nutrition Science.
- Project Fast (Kempower): Kempower, a Finland-based manufacturer of charging stations for

electric vehicles, announced February 2023 a \$41 million capital investment along with 600 jobs to locate its new manufacturing facility in Durham County. NC State identified key NC State assets to help secure the recruitment, including engagement with the FREEDM Systems Center and Clean Energy Technology Center.

- Project Switch (Atom Power): The electric vehicle charging infrastructure innovator announced a \$4.2 million capital investment along with 205 jobs to expand its headquarters and manufacturing operations in Mecklenburg County. Key NC State collaborators include the FREEDM Systems Center, College of Engineering's Industry Expansion Solutions and Clean Energy Technology Center.
- PlantD: PlantD, a manufacturer of carbon-negative building materials using perennial grass, announced in May 2023 a \$2 million capital investment along with 30 jobs to expand its production facility and headquarters in Oxford/Granville County. NC State was engaged on this project for several years, including hosting visits with PlantD executives on Centennial Campus, and creating collaborations with the Wilson College of Textiles. PlantD has since hired numerous NC State graduates.

Workforce Development Initiatives

NC Workforce Development Leadership Initiative: Launched in fall 2022, the initiative is led by NC State's Institute for Emerging Issues in partnership with EAPED, Continuing Education and the Municipal Research Lab. External partners include the NC Works Commission and NC Association of Workforce Development Boards. Collaborators secured a \$500,000 grant from the U.S. Economic Development Administration to launch the program, which directly aligns with the N.C. Department of Commerce's "First in Talent" plan to strengthen North Carolina's workforce. By providing training, education and resources, the program builds stronger partnerships between local workforce and economic developers throughout North Carolina. Program graduates become well-versed in the connections between building a job-ready workforce, meeting employers' talent needs and growing our economy. The intensive, sixmonth training program represents a diverse group of professionals from various backgrounds. Following completion of four, 12-hour courses, graduates receive the professional designation of Certified Workforce Developer (CWD). This year, the program graduated 30 professional, credentialed workforce developers. Under the guidance of NC State, these cohorts are currently engaged in six-month follow-up regional projects on workforce development, and public policy challenges and opportunities. The initiative also received full accreditation by the National Association of Workforce Boards (NAWB) and is being studied as a model to replicate nationally.

- NC Association of Workforce Boards Analysis: In partnership with the NC Association of Workforce Boards, NC State designed, monitored and approved a comprehensive statewide analysis of American Job Center/NC Career Center operations, working with researchers at the Duke Sanford School of Public Policy. The resulting report revealed several recommendations for increasing participation in statewide workforce development resources, including improved alignment on educational and workforce development strategies, strengthening partnerships with governmental agencies and community-based organizations, and prioritizing youth involvement in outreach and programming.
- Rural Works! Internship Program: Working collaboratively with NC State's Industry Expansion Solutions, we promoted the Rural Works! summer internship program to economic development partners in Rockingham County and Granville County, among other rural areas. As a result, 94 College of Engineering students have been hired by 57 companies located across 31 of North Carolina's tier-one and tier-two counties at a \$25/hour rate of compensation.
- Kids Voting NC Program: Kids Voting NC is a partnership between NC State Extension and 4-H, which builds the civic knowledge and skills of North Carolina youth, ages 5-17, through hands-on engagement with the election process. We partnered on the program's design and implementation to statewide advocacy groups, successfully expanded the program across eleven North Carolina counties, and established a statewide advisory board to expand to 25 additional North Carolina counties in FY 2024.

Professional Activities

In FY 2023 Director of Economic Development Tom White served in several leadership roles:

- Vice Chairman, NC Coalition for Global Competitiveness, GoGlobal NC
- Chairman, Research Triangle Foreign Trade Zone Rates Tariff and Legal Review Board
- Recipient, 2023 Ray of Light Award, Boundless Impact: Recognizes individuals who exemplify Boundless Impact's vision of building communities that are intentionally diverse, inclusive and equitable
- Board of Directors, Capital Area Workforce Development Board (currently serving as board secretary)

- Board of Directors, LC Industries for the Blind
- NC State representative serving on the UNC System Economic Transformation Council, as well as the NC Independent Colleges and Universities Economic Development Council

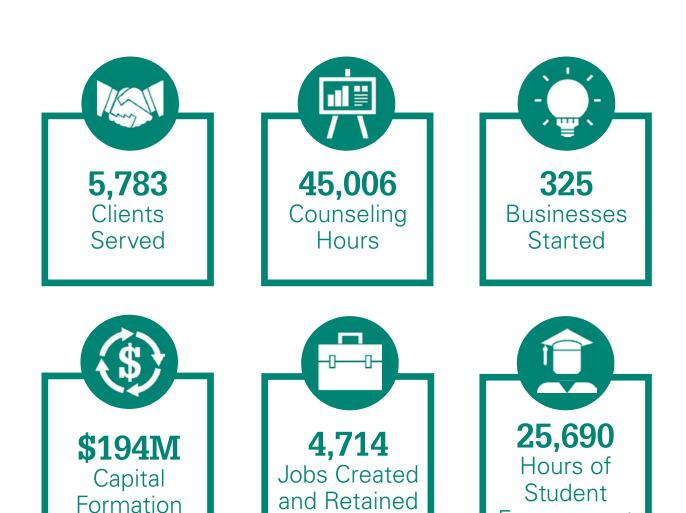


March 2023 Regional Economic Development Panel — from left: Research Triangle Regional Partnership (RTRP) Executive Director Ryan Combs; Cary Chamber of Commerce President Mark Lawson; EDPNC CEO Chris Chung; and NC State Economic Development Director Tom White.

SBTDC

Highlights

In FY 2023, the SBTDC worked to help North Carolina's small- and mid-sized businesses grow and thrive post-pandemic. These efforts resulted in the SBTDC being recognized as a leading resource provider in Governor Cooper's Small Business Week Proclamation. This year, the SBTDC staff engaged 274 undergraduate and graduate students with more than 400 small business clients statewide, providing 25,690 hours of applied learning experiences that benefitted both the students and industry.



Engagement

In addition, this year SBTDC clients were recognized locally and nationally for their economic impact, including Burgaw-based Mojotone and Cary-based Sciencix, Inc. Mojotone, which manufactures and supplies guitars and associated equipment for the music industry, was recognized as the Small Business Administration's (SBA) Small Business of the Year in North Carolina. Sciencix, which manufactures high-end R&D parts for the pharmaceutical industry, was recognized as both the SBA's North Carolina and National Exporter of the Year. This is the tenth year in a row an SBTDC client has been named the State Exporter of the Year. Both Mojotone and Sciencix were invited to the White House during National Small Business Week in May 2023 to receive these awards.



Burgaw-based Mojotone was named the SBA's Small Business of the Year for North Carolina.



Cary-based Sciencix was named both the SBA's North Carolina and National Exporter of the Year.



The Sciencix team met with President Joe Biden at the White House during National Small Business Week.

"With the support of the SBTDC, we not only grew our revenue both domestically and internationally, but we also found ourselves at the White House being recognized...as the National Exporter of the Year."

— Sciencix President Raj Bhandari

Engagement Through Strategic Partnerships

The SBTDC continues to strengthen and grow strategic partnerships in support of small business in North Carolina. Most recently, the SBTDC partnered with the NC Bankers Association, NC Rural Center and NC Chamber of Commerce to create a website (www.capitalopportunitiesnc. org) designed to help increase access to business financing in underserved markets. The site's content was created by the SBTDC with the lender search function maintained by the NC Bankers Association.

Many SBTDC staff members serve in leadership positions at the national, state and local level with economic development partners. For example, SBTDC Executive State Director Byron Hicks serves on the America's Small Business Development Center (ASBDC) Board of Directors and as Chair of the UNC System Economic Transformation Council. Some of the additional organizations where SBTDC staff are engaged in leadership positions are highlighted below.

















Achieving Organizational Excellence

The SBTDC maintains organizational excellence by carrying out its strategic plan priorities:

- **Clients:** The SBTDC surveys clients twice a year to stay current on the needs of small businesses. One survey is the Federal Reserve Bank's Small Business Credit Survey and the second is the National Client Impact Study. The survey findings revealed that clients working with the SBTDC outperform national and state averages. All staff complete the "Trusted Advisor" training in the early stages of their SBTDC career to promote consistent service delivery across the network. In addition, the SBTDC continually engages its host campuses and partner organizations to improve client outcomes and to generate statewide economic impact.
- **Thought Leader:** The SBTDC generates and shares content with businesses, partners and the public. One example is the partnership with Business NC Magazine. The SBTDC produces the

content for the annual Small Business Handbook published and distributed by the magazine. In addition, the SBTDC publishes a client newsletter that is emailed monthly to over 5,000 clients highlighting relevant topics, trends and resources for small businesses.

Team Recognitions

In FY 2023, several SBTDC team members were recognized for outstanding contributions to the organization, and its clients and partners.

- SBTDC Business Counselor Katrece Boyd was recognized for the Chancellor's Division Awards for Excellence
- Alex Viva, Regional Center Director at NC State, was recognized at the ASBDC National Conference as the NC SBTDC State Star.
- Bob Weston (State Administrative Office and previous Cares Act Program Director) and Gloria Monroe (General Business Counselor at UNC Wilmington Center) both received the SBTDC Executive Director's Award of Excellence
- Michael Moore (Regional Center Director at the UNC Charlotte Center) received the SBTDC Core Values Award for People
- Ginny Vaca (International Business Counselor at the NC State Center) received the SBTDC Core Values Award for Impact
- Paige O'Neill (International Business Counselor at the UNC Wilmington Center) received the SBTDC Core Values Award for Collaboration
- Bob Weston received the SBTDC Core Values Award for Future Focused





State and Local Relations

NC General Assembly

2023 Long Session

The 2023 Long Session of the North Carolina General Assembly began in January. Legislators have kept up a rapid pace throughout the last six months introducing over 1,600 bills and working diligently on their competing budget proposals. Our office continues to engage with legislators as well as various stakeholders on a large number of these bills that could potentially impact our students, employees, facilities, and processes. For example, in this legislative session, we have worked on the passage of the self-liquidating bill which allows us to acquire and renovate University Towers to address housing needs on campus. Additionally, we continue to work on legislation regarding appointments by the General Assembly to our Board of Trustees. One of the largest initiatives we continue to pursue is the advancement of the two-year budget.

While the legislature has now entered the conference process regarding finalization of the budget with an original anticipated timeline to conclude their work by the end of the fiscal year, they have not yet come to a final agreement as of the time of this report. Despite the pending nature of what's captured in the House and Senate budget proposals, they each reflect the North Carolina General Assembly's strong support and recognition of NC State's critical role in advancing our state's future. The proposals include a number of both NC State specific and UNC System overarching priorities. [Note that items below will indicate which specific budget proposal an item was included in, no notation means the item was included in both proposals]

NC State Specific Items:

- Engineering North Carolina's Future
 - Provides funds to NC State for faculty, staff, equipment, facility improvements, and other resources needed to support an expansion of the College of Engineering
 - \$10,000,000 in recurring funding
- College of Veterinary Medicine Class Size Expansion
 - Provides funds to increase the Doctor of Veterinary Medicine class size from 100 to 125 students at the NC State College of Veterinary Medicine
 - \$5,500,000 in recurring funding
- Education and Workforce Training Opportunities for Individuals with Disabilities [House]
 - Provides funds for an education, training, and workforce pilot program at NC State for individuals with intellectual and developmental disabilities

- \$3,000,000 in non-recurring funds in each year of the biennium; \$6,000,000 total
- Small Business and Technology Development Center [House]
 - Provides funds to the Small Business and Technology Development Center (SBTDC), which is administratively housed at NC State, to support additional positions at the SBTDC main and regional offices
 - \$1,500,000 in recurring funding
- North Carolina Future Farmers of America CTE Grants [House]
 - Provides funds to the North Carolina Association of Future Farmers of America, Inc. to administer grants to support agriculture education at middle and high school Career and Technical Education (CTE) programs
 - \$2,000,000 in non-recurring funds in each year of the biennium; \$4,000,000 total
- NC Clean Energy Technology Center [House]
 - Provides additional funds to the NC Clean Energy Technology Center at NC State
 - \$400,000 in non-recurring funds
- Textile Protection and Comfort Center Mist Lab Renovation [Senate]
 - Provides funds to the NC Collaboratory to upgrade laboratory space at the Textile Protection and Comfort Center at NC State to accommodate aerosol studies that simulate airborne PFAS particulate exposure
 - \$2,500,000 in non-recurring funds
- Agricultural Research Platform [Senate]
 - Provides funds for NC State to contract with SAS for an agricultural research platform to enrich research initiatives and support future grant opportunities, specifically utilizing data collection via in-field sensors to improve agricultural systems and profitability and to detect and respond to plant disease
 - \$1,000,000 in recurring funding
- Christmas Tree Genetics Program [Senate]
 - Provides additional funds to the Christmas Tree Genetics Program at NC State's College of Natural Resources
 - \$269,635 in recurring funding

Capital

- Engineering Classroom Building [House]
 - Provides funding for an Engineering Classroom Building at NC State to accommodate the substantial growth in the College of Engineering
 - Total authorized amount for this project is \$200 million
 - FY 2026-27: 20,000,000 NR; FY 2027-28: 60,000,000 NR; FY 2028-29: 60,000,000 NR

- Large Animal Hospital [House]
 - Provides funding for a Large Animal Hospital at the NC State College of Veterinary Medicine
 - Total authorized amount for this project is \$120 million; NC State shall commit to providing funding of \$50 million from non-State sources as a match for the intended State allocations totaling \$70 million for the project
 - FY 2025-26: 35,000,000 NR; FY 2026-27: 35,000,000 NR
- STEM (Integrative Sciences) Building
 - Provides continued funding to match \$90 million in receipts to construct a new STEM Building at NC State
 - Total amount authorized for the project including the match is \$180 million
 - FY 2024-25: 6,025,177 NR; FY 2025-26: 22,224,800 NR
- College of Management [Senate]
 - Provides funding for the advanced planning of a new College of Management facility at NC State
 - \$4,500,000 in non-recurring funds
- Dabney Hall Renovation [House]
 - Provides funding for the second phase of renovations at Dabney Hall
 - Total amount authorized for the project is \$80 million; previously received \$60 million for a total of \$140 million in funding
 - FY 2024-25: 8,000,000 NR; FY 2025-26: 24,000,000 NR; FY 2026-27: 28,000,000 NR; FY 2027-28: 20,000,000 NR
- Mann Hall Renovation
 - Provides funding for the second phase of renovations at Mann Hall
 - Total amount authorized for this project is \$30 million; previously received \$11.5 million for a total of \$41.5 million in funding
 - FY 2024-25: 3,000,000 NR; FY 2025-26: 27,000,000 NR
- Polk Hall Renovation [House]
 - Provides funding for the second phase of renovations at Polk Hall
 - Total amount authorized for this project is \$63 million; previously received \$10 million for a total of \$73 million in funding
 - FY 2024-25: 6,300,000 NR; FY 2025-26: 18,900,000 NR; FY 2026-27: 22,050,000 NR; FY 2027-28: 15,750,000 NR

Select UNC System Items:

- Salaries
 - House: Across-the-board salary increase of 4.25% effective July 1, 2023 and a 3.25% salary increase effective July 1, 2024 for a total of 7.5% over the biennium

- Senate: Across-the-board salary increase of 2.5% effective July 1, 2023 and a 2.5% salary increase effective July 1, 2024 for a total of 5% over the biennium
- Labor Market Salary Adjustment Reserve [Senate]
 - Provides funding for labor market salary adjustments to be used to address specific staffing issues by providing targeted salary increases to recruit and retain capable labor
 - \$15,000,000 in recurring funding
- Performance-Weighted Enrollment Change Funding
 - Adjusts funding provided to UNC constituent institutions as determined by the enrollment funding model, which factors in the change in resident student credit hours along with performance outcomes for certain metrics related to student success, affordability, and productivity
 - \$16,713,977 reduction in funding; House and Senate differed on the recurring versus nonrecurring nature of the funding
- Distinguished Professorship Matching Funds [Senate]
 - Addresses the backlog in State funds needed to match private donations supporting endowed professorships which help attract and retain top faculty talent; STEM only subject areas
 - \$10,000,000 in non-recurring funds in each year of the biennium; \$20,000,000 total
- Faculty Recruitment/Retention Fund [House]
 - Provides additional funding to the UNC faculty recruitment and retention fund
 - \$15,000,000 in recurring funding
- NCSSM and UNCSA Tuition Grant Scale-up [Senate]
 - Provides additional funds to support tuition grants for high school graduates of the North Carolina School of Science and Mathematics (NCSSM) and the University of North Carolina School of the Arts (UNCSA) who attend a UNC constituent institution
 - \$1,550,000 in recurring funding in FY 2023-24; \$3,600,000 in recurring funding in FY 2024-25
- NCSSM and UNCSA Tuition Scholarships Used for Summer Tuition [Senate]
 - Allows NCSSM and UNCSA tuition grants to be used for summer academic terms

Capital

- Repairs and Renovations
 - Provides funding for repairs and renovations of State-owned university facilities
 - \$280,503,000 in non-recurring funds in FY 2023-24; \$250,000,000 in non-recurring funds in FY 2024-25

State and Local Relations

- Capital Project Inflationary Reserve [House]
 - Reserves an additional \$225 million in the SCIF for cost escalation of authorized State agency and UNC System capital projects
- OSBM Flexibility Funds [Senate]
 - Provides funding that the Office of State Budget and Management (OSBM) may allocate to supplement funds allocated to other State agency projects up to 10% of the authorized amount for those projects
 - \$75,000,000 in non-recurring funds in FY 2023-24; \$75,000,000 in non-recurring funds in FY 2024-25
- **UNC Building Reserve Study**
 - Directs the Board of Governors to study the building reserve model and provide recommendations to improve the process of providing operation and maintenance funds for buildings
- Board of Governors Flexibility Repair & Renovation Funds [Senate]
 - Allows the Board of Governors flexibility to reallocate R&R funds within an institution and clarifies that R&R projects other than those specifically listed in the bill shall not exceed \$15 million

2023 Select Bills of Interest

Bills Passed Into Law

- Property Transfers
 - Ch. SL 2023-66 on 6/30/2023
 - Effective June 30, 2023
- House Bill 750, Address ESG Factors
 - Ch. SL 2023-64 on 6/27/2023
 - Companion to Senate Bill 737
 - Effective June 27, 2023
- Senate Bill 195, UNC Omnibus
 - Ch. SL 2023-102 on 7/14/2023
 - Companion to House Bill 317
 - Effective July 14, 2023, except as otherwise provided

- House Bill 364, Self-Liquidating Projects/

 Senate Bill 364, Nondiscrimination & Dignity in State Work
 - Ch. SL 2023-62 on 6/27/2023
 - Effective December 1, 2023
 - Senate Bill 582, North Carolina Farm Act of 2023
 - Ch. SL 2023-63 on 6/27/2023
 - Effective June 27, 2023, except as otherwise provided

Introduced/Pending Bills

- House Bill 20, Cash Commitment Act
 - Passed the House 112-5 on 5/3/2023: last action referral to Senate Health Care Committee on 6/12/2023
 - Would become effective October 1. 2023
- House Bill 28, NC Managing Environmental Waste Act of 2023
 - Passed the House 117-1 on 5/3/2023: last action referral to Senate Rules Committee on 5/4/2023
 - Would become effective when it becomes law, except as otherwise provided

House Bill 96, NC REACH Act

- Passed the House 69-47 on 3/22/2023; last action referral to Senate Rules Committee on 3/23/2023
- Would become effective when it becomes law, except as otherwise provided, and would apply beginning in the 2024-2025 academic year to students accepted for initial enrollment

House Bill 98, Medical Freedom Act

- Passed the House 73-41 on 4/26/2023; last action referral to Senate Rules Committee on 4/27/2023
- Would become effective on January 1, 2024

- House Bill 574, Fairness in Women's Sports
 - Vetoed by Governor on 7/5/2023; placed on House Calendar on 7/20/2023 for veto override vote
 - Would become effective when it becomes law, and would apply beginning with the 2023-24 school year
- House Bill 640, Career Path Options Transparency Act
 - Referred to the House Committee on Appropriations on 6/7/2023
 - Sections 1 and 3 of this act would become effective January 1, 2024; Section 5 of this act would become effective July 1, 2023; the remainder of this act would be effective when it becomes law
- House Bill 715, Higher Education Modernization & Affordability Act
 - Referred to the House Committee on Education - Community Colleges on 4/25/2023
 - Would become effective when it becomes law, except as otherwise provided; Part III (Eliminate Tenure) would apply beginning with persons hired on or after July 1, 2024

House Bill 808, Gender Transition/Minors

- Vetoed by Governor on 7/5/2023; placed on House Calendar on 7/20/2023 for veto override vote
- The provisions of this bill allowing a civil cause of action would become effective July 1, 2023; the provisions prohibiting surgical gender transition procedures, puberty-blocking drugs, or cross-sex hormones for minors and funding for those treatments would become effective August 1, 2023; the provisions allowing the State Health Plan to cover certain treatment would expire 30 days after the court order requiring that coverage is vacated or overturned: the remainder of the bill would be effective when it becomes law

Senate Bill 83, No High Risk Apps/Gov't Networks & Devices

- Passed the Senate 46-0 on 3/21/2023: last action referral to House Rules Committee on 3/23/2023
- Would become effective April 1, 2023

Senate Bill 512, Greater Accountability for Boards/Commissions

- Conference Committee appointed on 6/7/2023
- Would become effective when it becomes law, except as otherwise provided

Senate Bill 574, Authorize NIL Agency Contracts

- Passed the Senate 43-0 on 4/27/2023; last action referral to House Rules Committee on 5/3/2023
- Would become effective when it becomes law, except as otherwise provided

Senate Bill 680, Revise Higher Ed Accreditation Processes

- Passed the Senate 32-18 on 5/3/2023; last action referral to House Rules Committee on 5/4/2023
- Would become effective when it becomes law

Senate Bill 754, General Assembly <u>Appointments</u>

- Passed the Senate 26-13: last action referral to House Rules Committee on 6/29/2023
- Would become effective when it becomes law

Elected Officials Visits to Campus



- Representative Dean Arp made a number of significant visits to campus over the past year to include serving on the College of Engineering Industry Partners Panel, as a guest speaker at the 100 Years of Engineering celebration, and to tour our nuclear engineering facilities
- Senator Dave Craven also served on the College of Engineering Industry Partners Panel



- The Wake County Legislative Delegation joined Chancellor Woodson and senior university leadership for a reception at the Point
- Members of the House Agriculture Committee attended a tour of the College of Veterinary Medicine
- Representative Allison Dahle took a tour of the Lake Wheeler Road Field Laboratory
- Representative Maria Cervania and members of House Minority Leader Representative Robert Reives staff took a tour of the apiculture facility located at Lake Wheeler Road Field Laboratory



 Other legislative visitors to campus for various purposes: Representative Donny Lambeth, Representative Jeff Elmore, Senator Jim Perry, House Majority Leader Representative John Bell, Representative Ray Pickett, Representative John Bradford

Other Select Elected Officials Engagement

EAPED participated in UNC System Legislative Day at the North Carolina General Assembly



• EAPED participated in the North Carolina Council of Graduate Schools Graduate Education Day at the North Carolina General Assembly coordinating visits with Representative Ray Pickett, Senator Jim Perry, Senator Lisa Barnes, Senator Sydney Batch, Representative Julie von Haefen, and Senator Jay Chaudhuri for three of our graduate students

State and Local Relations



EAPED assisted in facilitating the NC State Women's Cross Country team's NCAA National Championship recognition and celebration at the Governor's Mansion



Local/Community Engagement

Local Engagement with Elected/Appointed Officials and Boards

- Worked extensively with a variety of stakeholders on numerous issues to include future plans associated with PNC Arena, Dix property, and road construction impacting the university
- Associate Vice Chancellor Julie Smith coordinated the Hillsborough Street Summit in partnership with the Hillsborough Street Community Service Corporation to bring community and university stakeholders together to discuss strategy for the future of the street
- Associate Vice Chancellor Julie Smith was asked to serve as the Chair of the Sports Event Investment Program (SEIP) Committee for the Greater Raleigh Convention and Visitors Bureau

Board of Visitors

EAPED successfully facilitated fall and spring meetings of the NC State Board of Visitors, with Senator Jim Perry and House Majority Leader Representative John Bell serving as legislative speakers, respectively. Additionally, we welcomed three new members to the Board with terms beginning July 2023:

- Rashida Hodge graduated from the NC State College of Engineering with a B.S. and M.S.
 in industrial engineering, and a Masters of Business Administration from Duke University.
 Hodge is the Vice President of Azure Data and Artificial Intelligence and Customer Success at
 Microsoft, where she leads a cross-functional team of technical architects in the data and Al
 space.
- Hal Lawton holds dual bachelor's degrees in Chemical Engineering and Pulp and Paper Science
 Technology from NC State University and a Masters of Business Administration from the
 University of Virginia. Lawton has served as President and Chief Executive Officer of Tractor
 Supply Company since January 2020.
- Robin Perkins is a graduate of the NC State Wilson College of Textiles. He co-founded Frontier Spinning Mills, which grew into one of the largest producers of cotton and cotton blend yarns in the world. In 2021, Frontier Spinning was acquired by Gildan Activewear.

Staff Mentions

- In recognition of Julie Smith's integral role within EAPED, to include her management of the business functions of the unit as well as the leadership and support she provides to each of the various divisions, Smith was recently promoted from Assistant to Associate Vice Chancellor.
- Additionally, Morgan High was recently promoted from Director of Marketing and Communications
 for the Partnerships Office to Director of Marketing and Communications for EAPED. Kudos
 to Morgan for her strong work in supporting and managing the communication needs of the
 entire unit.
- EAPED also recruited and hired a new Business Officer for the unit this year, Tenille Naumann. Tenille brings 20 years of NC State experience to the position and is a valuable addition to the team. Both Tenille and Morgan report to Associate Vice Chancellor Smith.

Federal Affairs

Protect and Promote Research Funding

Overall, in FY 2023 federal research and development programs saw a 10.2% increase, and Congress provided a 7.2% increase in federal support for fundamental research. There were significant gains for Defense (DOD), the Department of Energy (DOE), the National Science Foundation (NSF) and the National Institutes of Health (NIH) with modest increases for other agencies like the National Oceanic and Atmospheric Administration (NOAA), National Aeronautics and Space Administration (NASA), and no substantial cuts to research agency funding. The Biden Administration proposed substantial increases to nearly all federal research agencies, extension programs, and student aid funding, but those increases were moderate when the final Omnibus spending bill was agreed to by Congress in December of 2022.

For FY 2024, the Biden administration is requesting a 4.5% increase in federal research expenditures above FY 2023 levels. The FY 2024 budget proposal builds on substantial increases in the previous year's research investments and is the third year of the Biden Administration's effort to increase federal agency extramural research budgets.

Support Extension and Economic **Development Programs**

The President's FY 2023 budget proposed some very modest increases to extension and economic development programs like Smith-Lever, SeaGrant, SpaceGrant, and the Manufacturing Extension Partnership (MEP). Bipartisan congressional support in the FY 2023 appropriations process for federal extension and economic development led to slight increases in the programs which NC State leads and participates in, including the MEP Program. Extension programs including Smith-Lever (agriculture) and McIntire-Stennis (forestry) avoided cuts but were not significantly increased.

For FY 2024, the Biden administration is requesting a 4.5% increase in federal research expenditures above FY 2023 levels, as well as modest increases to select student aid programs.

Research Agency and Advocacy Highlights

National Science Foundation: NC State Federal Affairs successfully advocated for increased funding for NSF to \$9.5M in FY 2023, which represents an increase of 8% above FY 2022 and is the largest single-year increase in the history of NSF. The President's FY 2024 budget requested an additional 18% increase. Neither the House nor the Senate has yet to release their recommended FY 2024 funding levels for the NSF but Congress and the President have agreed to a top-line spending level that is equal to FY 2023 levels. NC State's Federal Affairs has led a series of more than 50 advocacy visits by deans, faculty and elected student leaders, as well as visits to campus by Representative Deborah Ross and Senator Ted Budd to labs where NSF research was featured prominently. Rep. Ross is a member of the House Science Committee and Senator Budd is a member of the Senate Commerce, Science and Transportation Committee. Congressional action on the FY 2024 budget got a late start and is still in the early stages. Over the last several years, NSF funding has grown faster than the overall discretionary spending levels.

Manufacturing Extension Partnership: NC State Federal Affairs successfully supported advocacy efforts for NC State's MEP program, resulting in MEP funding increasing by \$17 million (a 10.7% increase) in FY 2023. Federal Affairs and the MEP program conducted advocacy visits to all NC House and Senate offices regarding their FY 2024 funding levels. Congress increased MEP funding in FY 2023 to \$175 million, an increase of \$17M. The Biden Administration is proposing \$277 million for MEP in FY 2024, a 58% increase from FY 2023.

NC State's MEP program has over 100 employees statewide through a combination of federal grants and funding from the work they do with the private sector, but the primary programmatic source of funding is the Department of Commerce MEP program. Congress has not yet released the details of the FY 2024 Commerce, Justice and Science spending measure which includes MEP funding.

Student Aid (Pell, SEOG, Work Study and TRIO): NC State Federal Affairs supported in-person advocacy from NC State student government leaders for increases to the Pell Grant maximum, SEOG, Work-Study and TRIO. NC State also led a similar effort to include colleagues at other ACC schools. The student leaders met in D.C. for a multi-day event that included in-person advocacy visits at the end of January 2023. As a result, in FY 2023 Congress increased the maximum Pell Grant by \$500, and increased SEOG to \$910M and Federal Work-Study to \$1.2M — both increases of 1.7%. There were also modest increases for GEAR-UP (+2.6%) and TRIO (+4.7%). The FY 2024 bills have not been released as of the date of this report. NC State Federal Affairs continues to encourage our delegation to support increases to student aid accounts in the FY 2024 appropriations process.

SpaceGrant and SeaGrant: NC State advocacy efforts led to support for funding NASA's SpaceGrant Program in the FY 2023 Omnibus Appropriations bill. In March 2023, Federal Affairs coordinated in-person D.C. visits with the N.C. delegation to discuss the impact of the SpaceGrant program in our state. In FY 2023, SpaceGrant received \$58 million — an increase of 6.4%. In addition, NC State Federal Affairs coordinated March 2023 congressional advocacy efforts with SeaGrant program leaders and external stakeholders. SeaGrant funding has increased in each of the past several years, growing by \$4 million in FY 2023 to total \$80 million.

US Department of Agriculture (USDA) Research And Extension: NC State Federal Affairs has supported campus agriculture stakeholders and outside advocates with in-person visits with nearly every congressional office from North Carolina in the Spring of 2023. The Colleges of Veterinary Medicine (CVM), Natural Resources (CNR) and Agriculture and Life Sciences (CALS) all did in-person visits in March of 2023. Our office works closely with national associations and prominent land-grant universities that have significant agriculture capacity funding to advocate for more Hatch, Smith-Lever, and McIntire-Stennis funding. Those three funding streams have not increased at the same rate as the competitive agriculture grant program, Agriculture and Food Research Initiative (AFRI).

Federal Affairs, CALS, CNR and the Office of Research and Innovation (ORI) hosted an August 2022 agriculture and natural resources congressional staff trip that featured the NC State campus, Schenck forest, the Piedmont area, and Kannapolis. The staff delegation visit included tours of research farms, Kannapolis facilities, as well as cooperators and partners in the green and turf grass industries. The visit also included a tour of the Central Crops Research Station. All of those locations gave details and examples of the importance of competitive and formula-based AFRI USDA federal research funding as well as Hatch, Smith-Lever, and McIntire-Stennis.

USDA capacity funding saw increases below two percent in FY 2023. The FY 2023 spending measure provided a slight increase of 2.2% for AFRI competitive research to \$455M. Growth in these accounts has been a priority for our agriculture and natural resources research faculty. NC State is a top recipient in each of the three formulas and competitive AFRI research.

USDA Report Language on ARS/NC State initiatives: Congress can direct federal agencies to invest in areas of interest. There are several specific directives from the FY 2023 Agriculture report language that directly and favorably impact NC State and Agricultural Research Service (ARS) Raleigh. One such directive supports GEM (Germplasm Enhancement of Maize) and Small Grain Genomics Research, which are both led by ARS Raleigh. The Food Animal Residue Avoidance Database (FARAD) program also received \$2.5M. NC State is part of a 4-university consortium that runs the FARAD program.

USDA Specialty Crop Research Initiative (SCRI) Match Elimination: The 2018 Farm Bill included a 100% matching requirement, which was first imposed on land-grant universities in 2019. Since then, NC State has successfully advocated for and secured legislative language inserted into the annual spending measures, which allow USDA to waive the matching requirement in the final Appropriations law.

Project-related Advocacy

In addition to successful advocacy for research and extension programs in FY 2023, NC State Federal Affairs has been engaged in several high-profile opportunities, including Pathfinder Airborne, High Entropy Ceramics for Hypersonic Applications, USDA-supported facilities upgrades to the Central Crops Research Station, and PowerAmerica.

Army Futures Command (AFC) Research Partnership: NC State Federal Affairs has been engaged in the FY 2022 and FY 2023 congressional plus-up efforts to develop a response to the 82nd Airborne partnership with NC State suggested by the AFC. In FY 2021, Congress included \$8 million in FY 2022, and an additional \$8 million for the research partnership was included in the FY 2023 defense spending measure.

High Entropy Ceramics for Hypersonic Applications: The FY 2023 Omnibus appropriations report included \$9 million for this new initiative at NC State. Federal Affairs has worked closely with ORI and the College of Engineering to advocate for a new navy research initiative in the area of High Entropy Ceramics. The navy-endorsed proposal was supported in FY 2024 by Reps. Ross and Nickel as well as Sen. Tillis.

USDA Agricultural Research Service Facilities Improvement Request: Congress included \$1 million for facilities improvements at the Central Crops Research Station. NC State Federal Affairs worked closely with ORI, CALS, and USDA ARS to develop a facilities improvement proposal for the Central Crops research facility that would support more than \$7 million for infrastructure improvements related to the soybean and corn improvement efforts jointly supported by NC State and USDA ARS researchers. The FY 2023 Omnibus appropriations bill included the first \$1 million to begin the facility upgrades requested. The House version of the FY 2024 Agriculture Appropriations measure includes another \$1 million for additional upgrades.

DOE PowerAmerica Renewal: At the request of members of the NC delegation, Congress included language in the FY 2023 Energy and Water appropriations bill that directed DOE to use up to \$12 million to extend funding support for PowerAmerica. NC State Federal Affairs along with partners at other universities led the effort to support renewed funding for all the Department of Energy Clean Energy Manufacturing Institutes (CEMI) including NC State's PowerAmerica. In May

of 2023, Federal Affairs brought the PowerAmerica Director to DC to advocate for similar language to be included in the FY 2024 Department of Energy spending bill.

Distinguished Visitors

Senator Richard Burr Visit: In July 2022, Senator Burr visited NC State to meet with the Lab for Analytic Sciences fellows and tour the Plant Sciences Building.

Representative Ross Visits: Congresswoman Ross brought her entire staff to NC State's campus in August 2022, and has also been hosted on campus four additional times by NC State Federal Affairs: 1) United States Trade Representative (USTR) visit on November 12, 2022, 2) NSF Director visit on November 22, 2022, 3) White House Science Advisor visit on February 10, 2023, and 4) serving as the Park Scholar keynote speaker on February 17, 2023.



Deputy Secretary of Commerce Don Graves Visit: On November 3, 2022, Don Graves, Deputy Secretary of Commerce, visited NC State's PowerAmerica lab to see the progress and the impact that the research initiative has had on wide bandgap semiconductors. The Deputy Secretary is responsible for overseeing the Department of Commerce's Manufacturing USA initiative.

U.S. Trade Representative Katherine Tai Visit: On November 12, 2022, the U.S. Trade Representative, Ambassador Katherine Tai, visited NC State's Wilson College of Textiles. She was informed about the partnerships NC State has with the textile industry that could benefit trade relationships in the Caribbean Basin and other efforts to on-shore or near-shore textile manufacturing.

NSF Director Sethuraman Panchanathan Visit: On November 22, 2022, the NSF Director and Rep. Ross visited campus. During the NSF Director's visit, he toured ASSIST, the Nanofabrication

Facility, Nonwovens Research Center, the artificial intelligence chemistry synthesis labs, and the Phosphorus Science and Technology Center (STEPS) research initiative.

Energy Assistant Secretary Kathryn Huff Visit: On January 26, 2023, the Assistant Secretary for Nuclear Energy, Dr. Kathryn Huff, visited NC State's nuclear engineering department and the PULSTAR reactor.



White House Science Advisor Arati Prabhakar Visit: On February 10, 2023, President Biden's Science Advisor, Arati Prabhakar, visited NC State. She toured FREEDM, the NSF STEPS initiative and BTFC.



Senator Ted Budd Visit: On April 13, 2023, Senator Ted Budd made his first visit to campus as North Carolina's newest U.S. Senator. During the visit, he saw the Plant Sciences Building, had a brief visit with the NC State Board of Trustees, toured the research labs for Carbon Electronics, and saw the CAMAL additive manufacturing research facility.

Professional Activities

In FY 2023, Director of Federal Affairs Matt Peterson served in several leadership roles:

- Planning Committee for the APLU Council on Government Affairs Summer 2023 meeting, developing the agenda, securing speakers and presenters, and managing the small team of fellow CGA members who put together the August meeting
- APLU CGA Liaison to the Council on Academic Affairs
- Served on the Science Coalition Steering Committee, which is responsible for developing and leading the execution of the Science Coalition's federal research advocacy efforts on behalf of all the Science Coalition members

