Chancellor's Report

Board of Trustees – October 13, 2023

UNCWelcome 2023

- Record-setting applications for Class of 2027
- Record-setting first-year class
- High demand for on-campus housing
  - Exploring options for the future – residence hall, collaboration with community partners
- National ranking remains among the best in the country (109 among public national universities, per *U.S. News & World Report*)

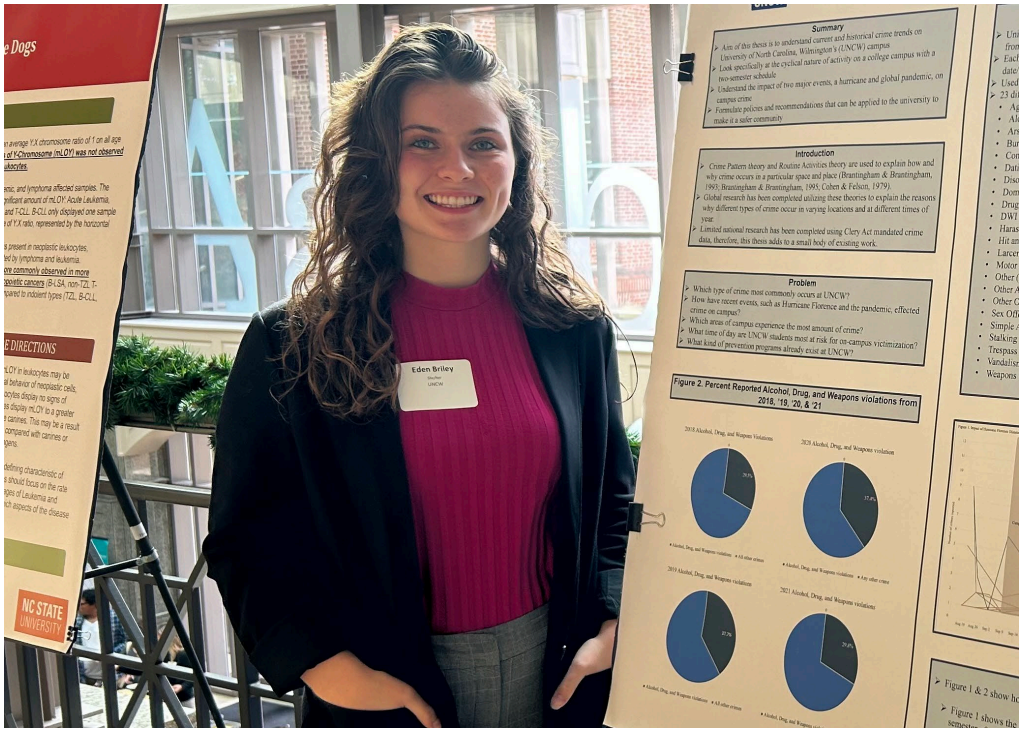
Family Weekend 2023

Board of Trustees Welcomes Steve Griffin ’82

Our Students

Congratulations

Congratulations to Seahawk Recipient of DeJoy-Woś Family Foundation Scholarship



Eden Briley ’23
interned with the USDA’s Single Family Housing Guaranteed Loan Program

Student Leadership

Cody Ellis Brandon

2023-24 SGA President

- Senior
- Sociology Major
- Clinton, NC

SGA Leadership (Student Body President and Vice President):

1. Inaugural On-campus Vintage Market Day hosted on October 8 with student-led live band performance, food trucks, yard games, and 30+ vendors selling second-hand, vintage clothing.
2. Continual development of UNCW's first donation center: Seahawk Swap Shop. 100+ items have been donated and we are set to open by the end of October.
3. Partnered with Transition Programs to re-create the Class of 2024 class photo.
4. Finalization of SGA tailgates.
5. Proposal in progress for new campus traditions and collaboration with senior class gifts.

Chief of Staff Accomplishments and Works in Progress (WIP):

1. Hosted and presented at the State of SGA Address.
2. Represent SGA and the UNCW student body in professional settings, i.e., Calendar Committee Appointment, UNC Association of Student Government and VCSA Search.

Communications Accomplishments and Works in Progress (WIP):

1. Proposed partnership with Good Shepherd Center Food Donation for UNCW's annual Wagsgiving.
2. 100+ Student feedback results from snacks with senators outreach event.

Treasury Accomplishments and Works in Progress (WIP):

1. Merged operational and promotional funding to increase availability and accessibility to student organizations.
2. Increased Travel funding to $750 per student for up to five (5) students.

Diversity, Equity, and Inclusion Accomplishments and Works in Progress (WIP):

1. Hosting professional development and networking events for underserved and underrepresented student populations with CHSAA, CHHS and CSE.
2. Create four (4) new senate positions for each cultural center and OIDI campus partners.

Marketing Accomplishments and Works in Progress (WIP):

1. Expanded inventory of promotional items to market SGA to the greater student body of UNCW.
2. Live streamed the state of the SGA address with 1,000+ views.

Health and Wellness Accomplishments and Works in Progress (WIP):

1. Ongoing collaboration with UNCW departments to display commitment to all aspects of the Healthy Hawks model and the eight (8) dimensions of wellbeing.
2. Increase completion rate of UNCW scholarship application by hosting hands-on writing workshops with Financial Aid and the University Learning Center.

Campus Services:

1. Identifying possible alternative commuter routes for students to relieve congestion in pedestrian-heavy crossroads and establish a speed limit and parking zone for students with personal vehicles on Chancellors Walk.
2. Increasing visibility of the Campus Dish website and nutritional facts noted within the dining halls.

Student Services:

1. Began a promotional marketing campaign to highlight DePaolo Hall and its major services provided to students, i.e., UHC, ULC and Counseling Center.

Academic Affairs Accomplishments and Works in Progress (WIP):

1. Completed Grade Replacement Policy Resolution and will present at the upcoming SGA Senate Meeting.
2. Served as Student Representative at Faculty Senate Meeting.

External Affairs Accomplishments and Works in Progress (WIP):

1. Increasing student voter engagement with on-going partnership with community and politically-focused student organizations at UNCW.
2. Developed proposals to increase off-campus safety with collaboration with the Director of Health and Wellness.

Internal Affairs Accomplishments and Works in Progress (WIP):

1. Hosted a legislation writing workshop for SGA members.

Cutting-Edge Student-Faculty Research in AI, NC Reef Ecosystems

Dr. Karl Ricanek Jr

Director of I3S Institute

Program Coordinator, Intelligent Systems Engineering

CEO and Chief AI Scientist Lapetus Solutions Inc

Auris Comron Nasser

Senior computer science major

Presenter

1989: Began researching image processing, machine learning, and AI

1990: Developed **AI apps** for **U.S. submarine flight**

1991: **First Generative AI**: Teaches computer to compose music like humans

1993: Developed a system to monitor power grids in NW U.S.

1996: Developed **AI targeting system** for aerial FLIR images McDonald Douglas

1999: Developed **AI-based face recognition**

2003: NSA award, artificial intelligence award at UNCW

2006: CIA funding via Dyncorp/CSC

2007: CASIS, first ODNI S&T CAE

2009: IARPA, first UNC system school to be awarded IARPA grant

2010: First of **series of FBI awards**; develop 3 commercial applications. Developed the field of research in facial analytics

2012: First of a **series of ORNL contracts**; developed tools to for child pornography; deployed to law enforcement.

2014: **Patents (2) AI-based facial analytics**

2018: CIBAR Consortia (CIA). Australian DoD/IC award.

2019: **AI+Health Seminar Series** Congressional funding request $15 million AI+Human Performance

2020: Develop **AI Concentration in Computer Science**

2021: **HAI Fellows and AI Research Collider**

2021: **Intelligent Systems Engineering** (AI with IoT, Embedded Systems, Smart Systems)

2023: Seminar Series on Generative AI/ChatGPT 3.5

AI @UNCW

Research Sponsors

National Security Agency (NSA)
Central Intelligence Agency (CIA)
Federal Bureau of Investigation (FBI)
Army Research Lab
Intelligence Community Advanced Project Activity (IARPA)
Office of Directorate of National Intelligence Army (ODNI)
Defense Intelligence Agency
MIT Lincoln Labs
DynCorp, CSC and Unisys

Australian Defence Dept
UK Home Office

National Science Foundation (NSF)
National Institute of Health (NIH)
National Institute of Standards and Technology (NIST)

Patents

US **8,705,875**, April 22, 2014.
US **8,913,839**, December 16, 2014

Spinouts / Commercialization

Lapetus Solutions Inc,

Licenses

MORPH Commercial Database:
Ford, Intel, Microsoft, Samsung, NEC, Australian Dept of Defence, Digital Signal Corp, OMRON, MITRE, etc.

Map of AI Products Sold

AI @UNCW

Programs

- Intelligent Systems Engineering (B.S.)
- Computer Science (B.S.)
  - AI Concentration
  - Neural Science Concentration
- Neural Science, Psychology (M.S.)
- Computer Science and Information Systems (M.S.)
- Data Science (M.S.)
- AI Bootcamp (C.E.)

Faculty

- ~25 AI Faculty

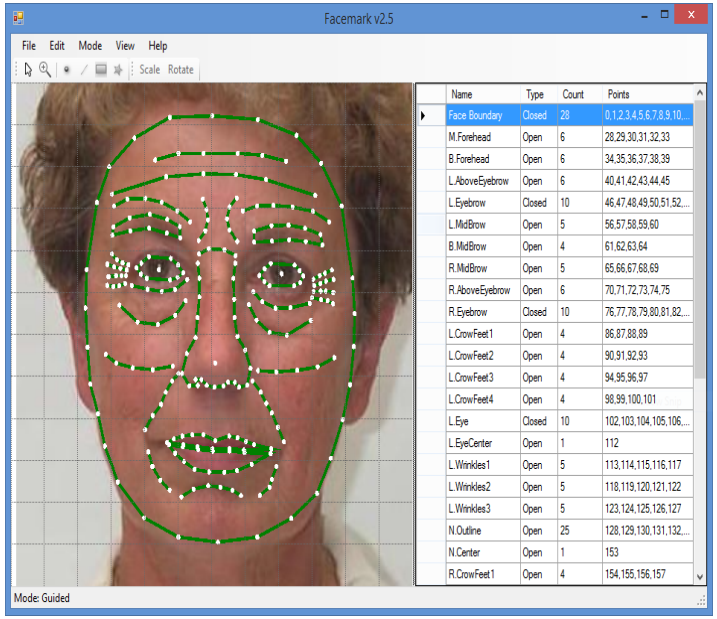
Student Research

- Active AI research by students across most majors from Art to Education to Marine Science to Exercise Science.

Student Research

Fully automated and configurable face annotation systems.

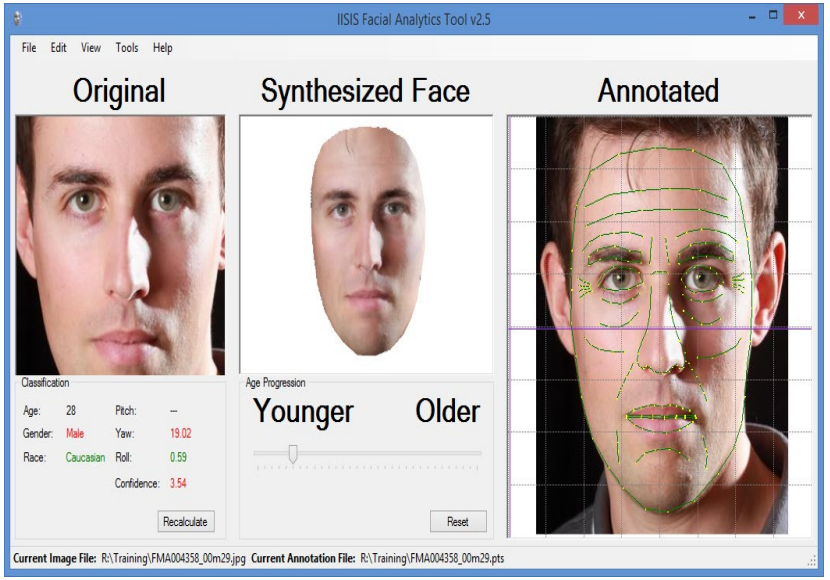
Delivered to FBI Biometric Center of Excellence.



Student Research

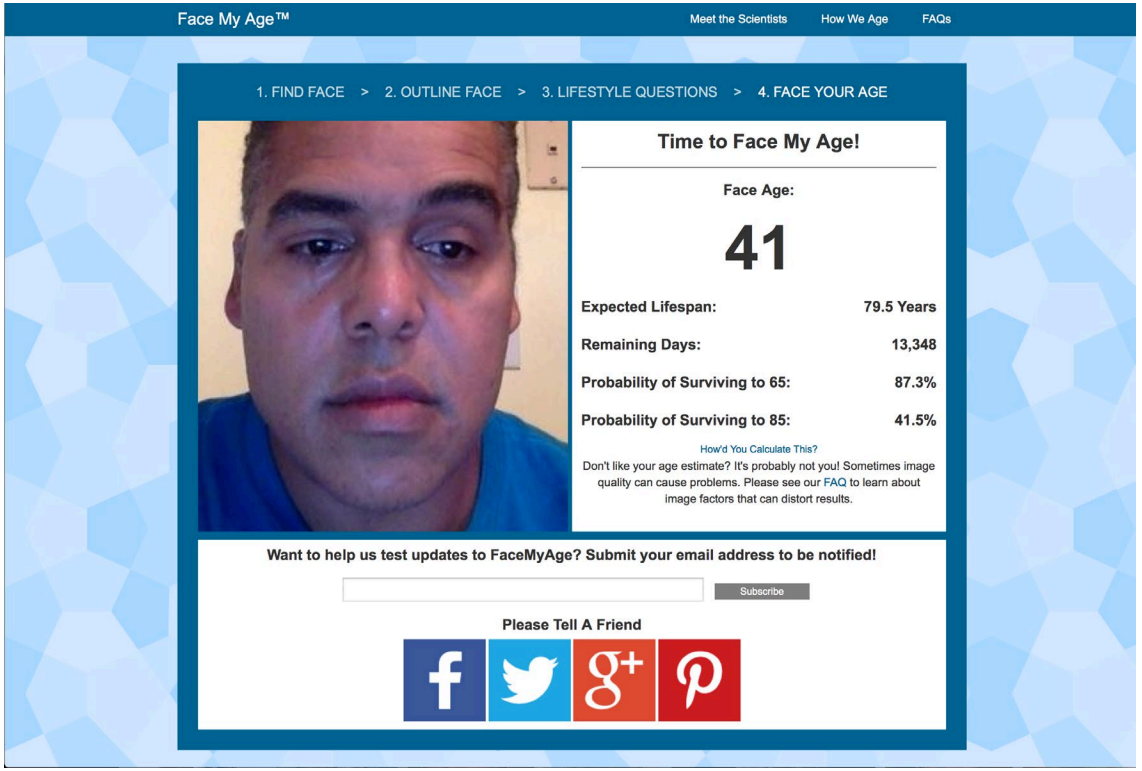
Fully automated facial analytics and age-progression system.

Delivered to FBI Biometric Center of Excellence.



Student Research

First Facial Analytics Application July 2014

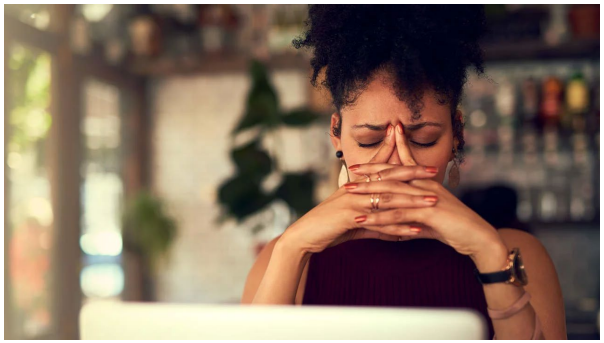


Developed by university research lab: www.FaceAging.com

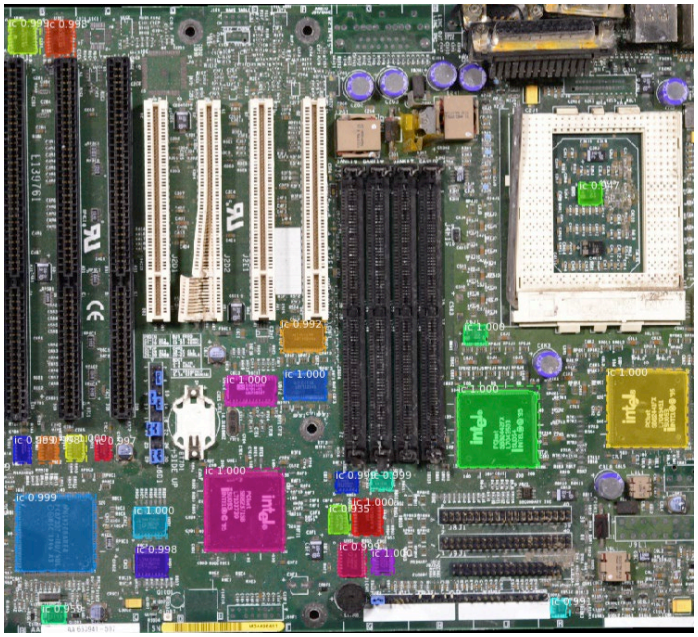
Student Research: Predicting Ovarian Health from the Face

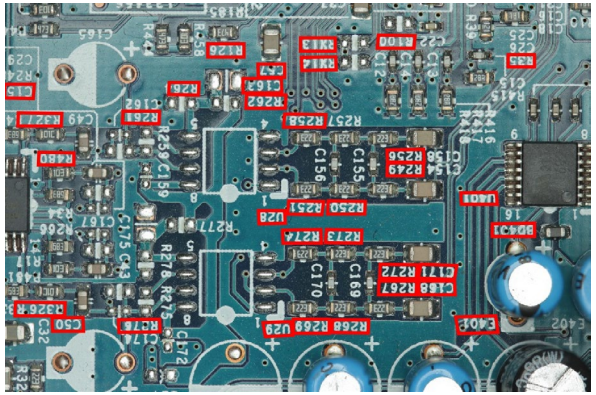
The UNIVERSITY of OKLAHOMA Health Sciences Center

Physicians at an infertility clinic at the Oklahoma Health Sciences Center (OUHSC) have hypothesized that ovarian reserve declines with age, which partially explains why some women are infertile. Women that are experiencing accelerated aging may lose their ovarian reserve more rapidly, so one way to detect whether this is happening is to use a simple biomarker of rate of aging, which can be gleaned from a selfie face image.



Student Research: Protecting Cyber-Hardware Using AI
Sponsor: U.S. Army





- My name is **Auris Comron Nasser**. I was born in Lowell, MA. I moved to Wilmington, NC on December 31, 2014. My father taught IT at Mount Wachusett Community College and has led as an inspiration for me growing up. Today, I hold a strong passion for computer systems and technology.
- I attend UNCW as a senior in Computer Science and as a sophomore in **Intelligent Systems Engineering (ISE)**. UNCW's ISE program is the only engineering program in the state that combines AI, IOT & embedded systems, and mechatronics.
- With my degree in ISE, I plan to continue to honor my country by taking my skillset to work with the military or U.S. Government. I want to help create the innovations of the future.

AI Economy and Workforce

- AI could contribute up to **$15.7 trillion to the global economy in 2030**, more than the current output of China and India combined.
  Source: https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html
- McKinsey Global Institute predicts that around **70% of companies** will adopt at least one type of **AI technology by 2030**.
  Source: https://cepr.org/voxeu/columns/impact-artificial-intelligence-growth-and-employment#:~:text=The%20World%20Economic%20Forum%20concluded,Lawrence%20et%20al.
- The report emphasizes that, at its core, AI tools are informing and expanding, **not replacing, human labor** and, "if developed and deployed ethically, [AI] has the ability to augment human capabilities and empower people to do much more."
  Source: https://www.uschamber.com/technology/ai-and-the-future-of-work
- By 2030, activities that account for up to **30 percent of hours** currently worked across the U.S. economy **could be automated**—a trend accelerated by generative AI.
  Source: https://www.mckinsey.com/mgi/our-research/generative-ai-and-the-future-of-work-in-america
- Job Growth: CAGR of **38.1% between 2022 to 2030**
- Average Salary: **$155,546**
  Source: https://www.knowledgehut.com/blog/data-science/ai-engineer-career

This Photo by Unknown Author is licensed under CC BY-NC

Contact: Karl Ricanek
Email: ricanekk@uncw.edu
Phone: 910.962.4261

Cutting-Edge Student-Faculty Research in AI, NC Reef Ecosystems

Dr. Matthew McLean
Assistant Professor of Biology and Marine Biology

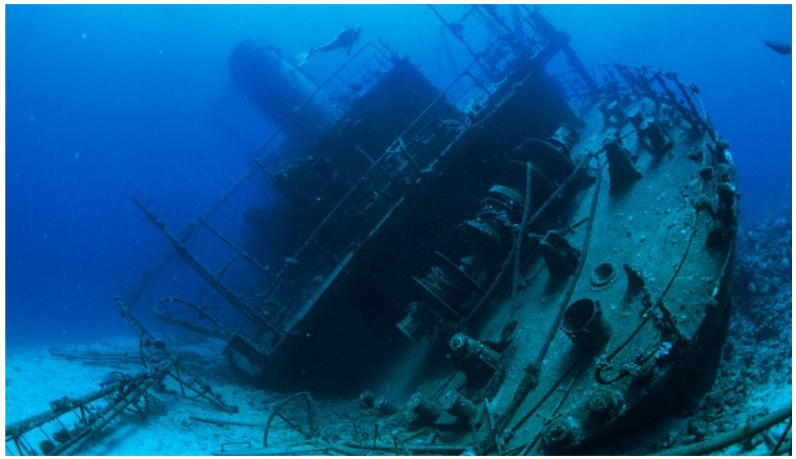
Jared Oviatt ’23
Graduate Student

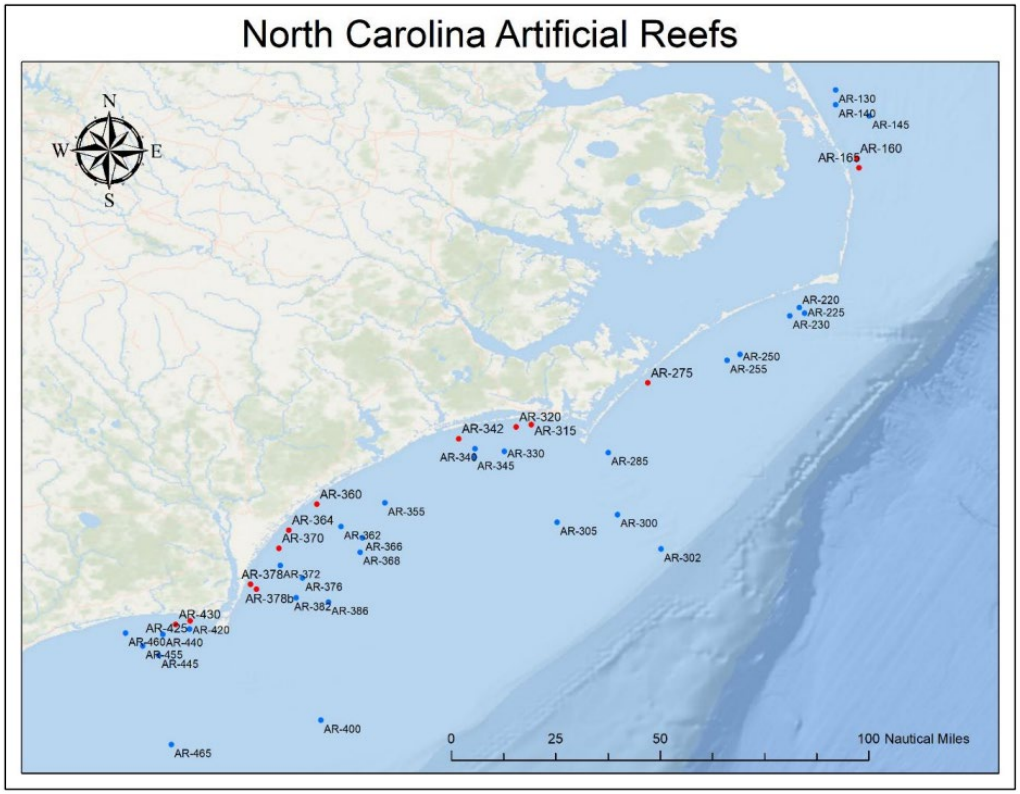
Image credit: www.mclean-lab-uncw.com/people

North Carolina Reef Ecosystems

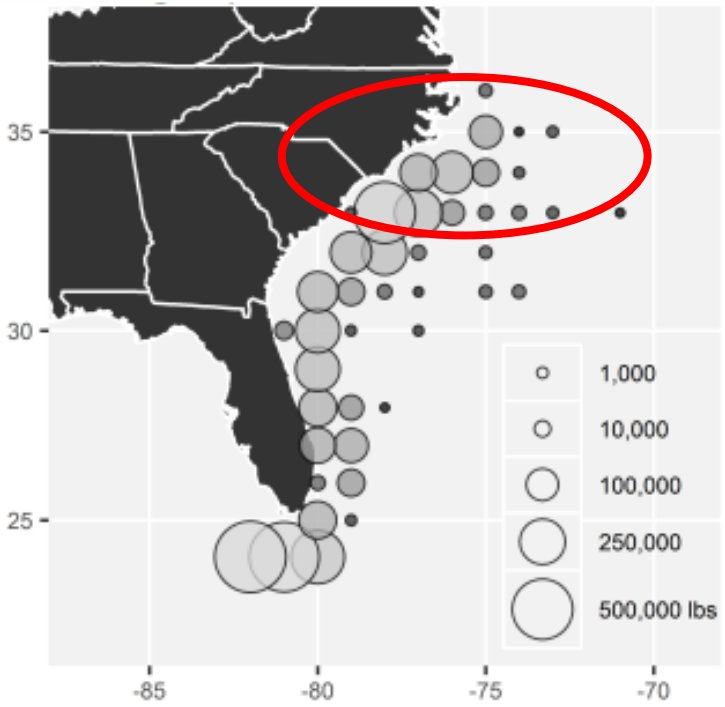
NC Reefs: Artificial Reef Program

- Popular SCUBA destinations
- Artificial reefs used to enhance ecosystems
- > 400 AR sites in NC





North Carolina Reef Ecosystems - Value

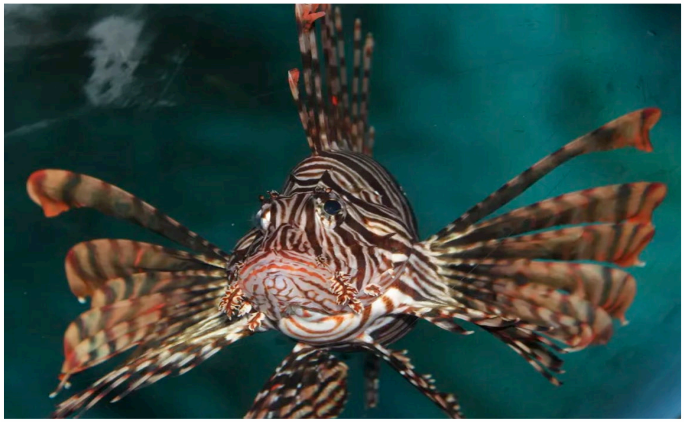


- NCDMF: up to $1 million annually on ARs
- 2022 fishing license sales: ~$6 million
- SE U.S. Snapper/Grouper complex:
  $20 million annual revenue

The Issue: No Long-Term Monitoring

Increased global temperatures

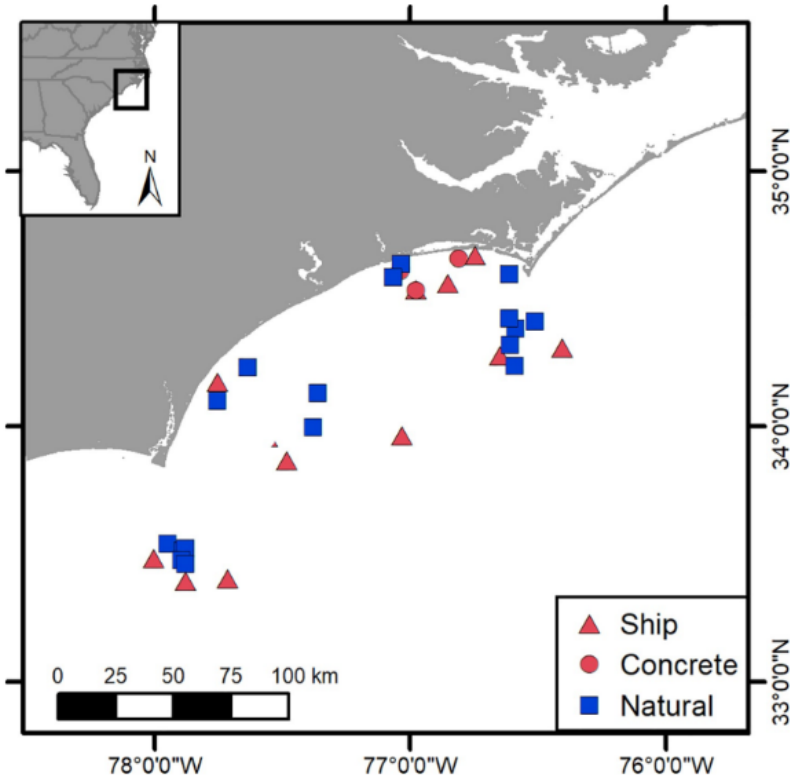
Increased natural catastrophes



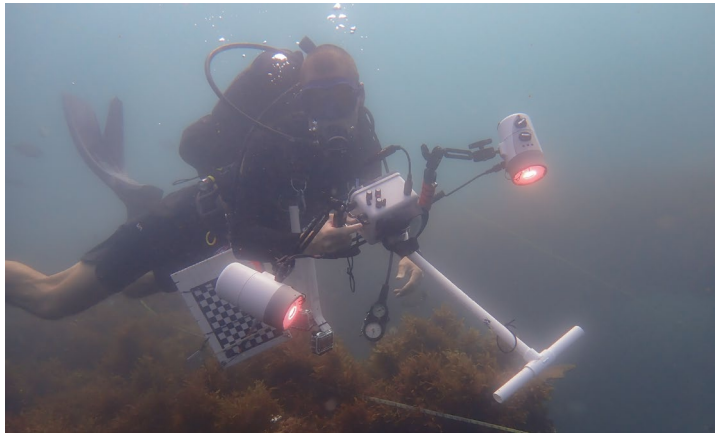
Tropicalization, invasive species

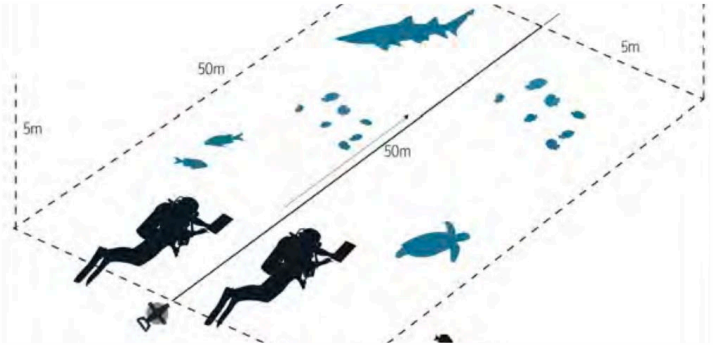
Our Project:
How Are Reefs Changing Over Time?

30 Reefs Surveyed in 2013-15

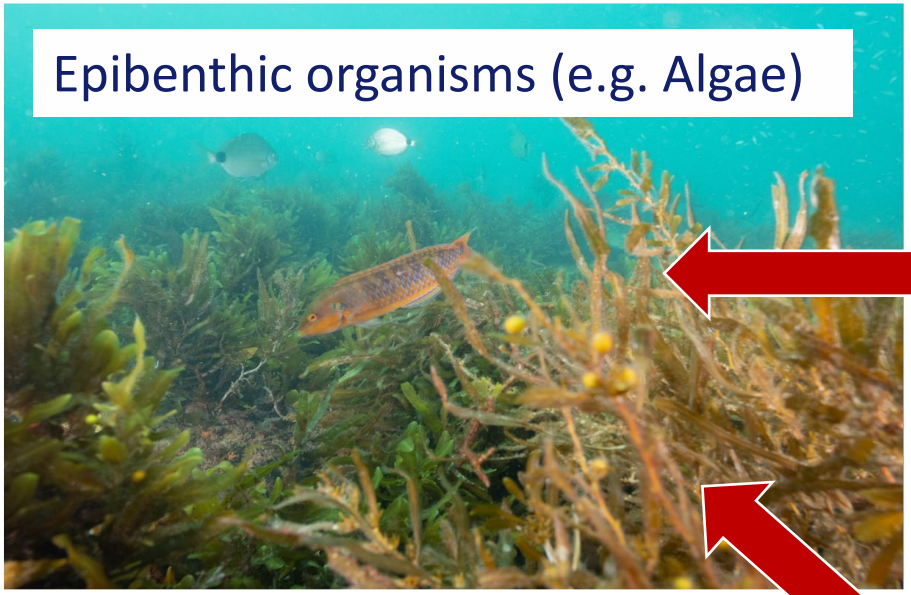


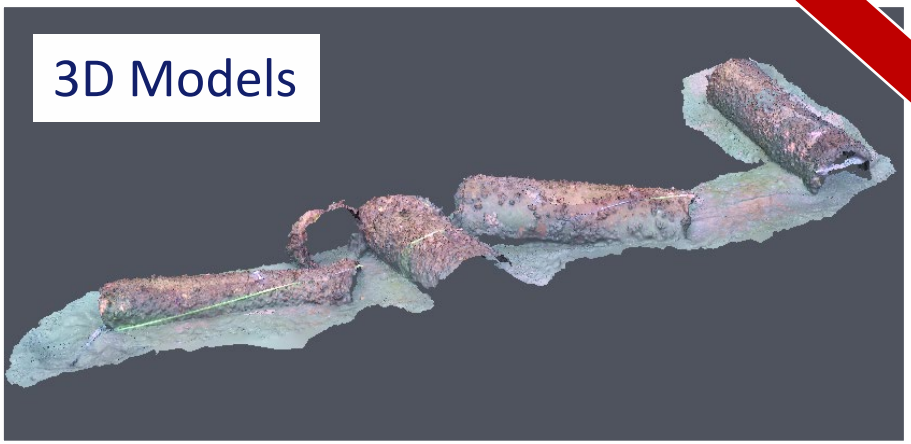
Re-Surveying in 2023-24

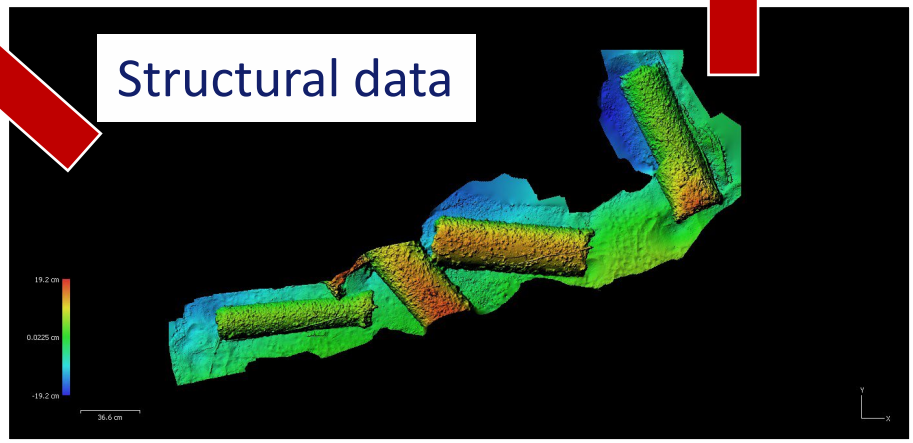




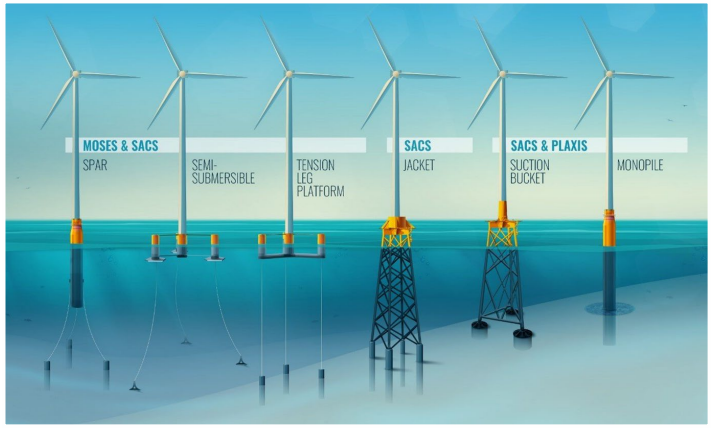
What can we do with this?







Broader Impacts



- Supports and protects North Carolina blue economy
- Informs offshore infrastructure development
- Opportunity to engage with regional partners

Sea Grant North Carolina

NORTH CAROLINA MARINE FISHERIES

Our Faculty and Staff

Staff Leadership

Susan Smith

Chair 2023-24 | Staff Senate

- Vice Chair | UNC System Staff Assembly
- Member Services and Operations Coordinator | Department of Campus Recreation

Congratulations, Faculty Award Recipients

UNCW Athletics Updates

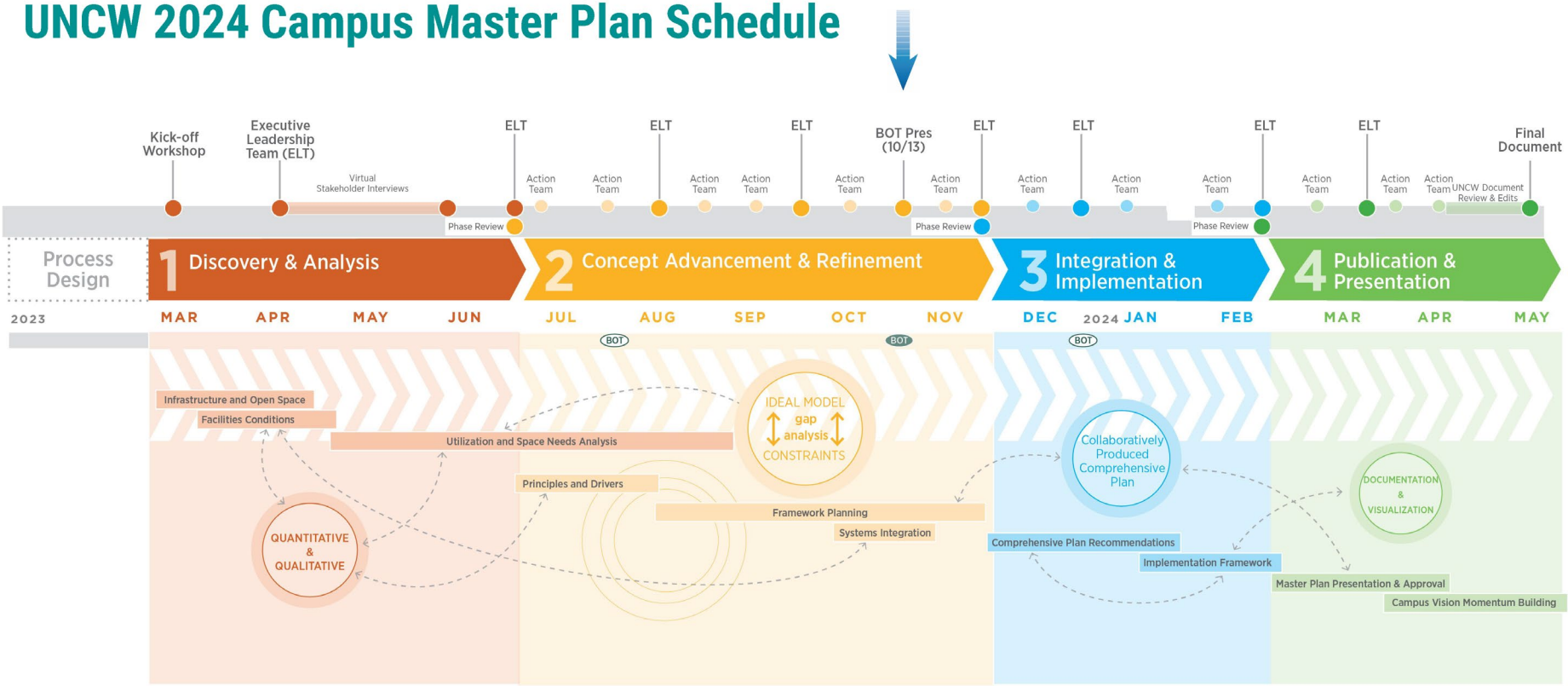
- The **NCAA Holistic Model** will be implemented in August 2024. This will require all schools to increase their support for student-athletes, including:
  - Approved medical expenses
  - Degree completion fund extensions
  - Confirmation that mental health services, concussion management protocols, academic support services, and counseling and life skills are provided.
- Athletics has partnered with **Populous**, a global architectural and design practice, to review facilities and provide recommendations that are in line with our strategic plan and master plan.
- Athletics announced a **comprehensive NIL program called FLIGHT** in mid-July along with a partnership with INFLCR, a NIL software system. INFLCR provides a space for student-athletes to disclose their NIL activities and connect with the community through The Seahawk Exchange, an online NIL marketplace.

UNCW Master Planning

UNCW 2024 CAMPUS MASTER PLAN PRINCIPLES

- Cultivate a sense of belonging for all campus users
- Promote interdisciplinary collaboration
- Enhance UNCW identity within the community and region
- Optimize use of space and resources
- Elevate campus experience

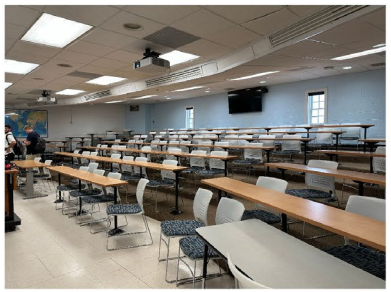
UNCW 2024 Campus Master Plan Schedule

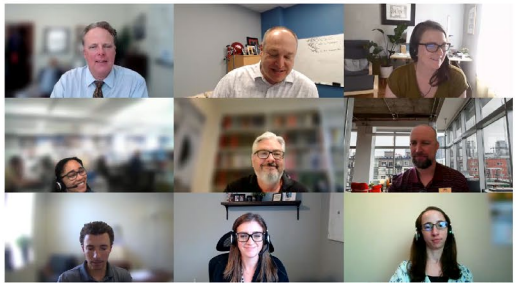


UNCW 2024 Campus Master Plan Process | Stakeholder Engagement

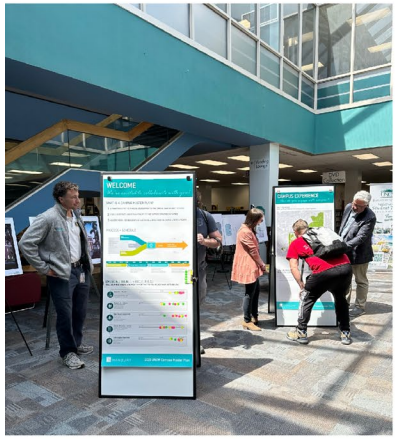
- Provost and Vice Chancellors
- Board of Trustees Workshop
- Deans
- Undergraduate Education and Faculty Affairs
- Student Engagement, Enrollment and Retention
- Global Partnerships and International Education
- Institutional Research and Planning
- Research and Innovation
- Community Engagement and Impact
- Graduate, Continuing and Lifelong Education
- Teaching, Learning and Library Services
- Center for Marine Science
- University Advancement
- Athletics
- UNCW Police Department
- Information Technology
- Business Affairs
- Student Affairs
- Chancellor
- Dining Services
- Parking Services/Transportation
- Student Recreation
- Housing and Residence Life
- Campus life
- Executive Leadership Team Workshop(s)
- Action Team

+ 60 Campus Meetings!

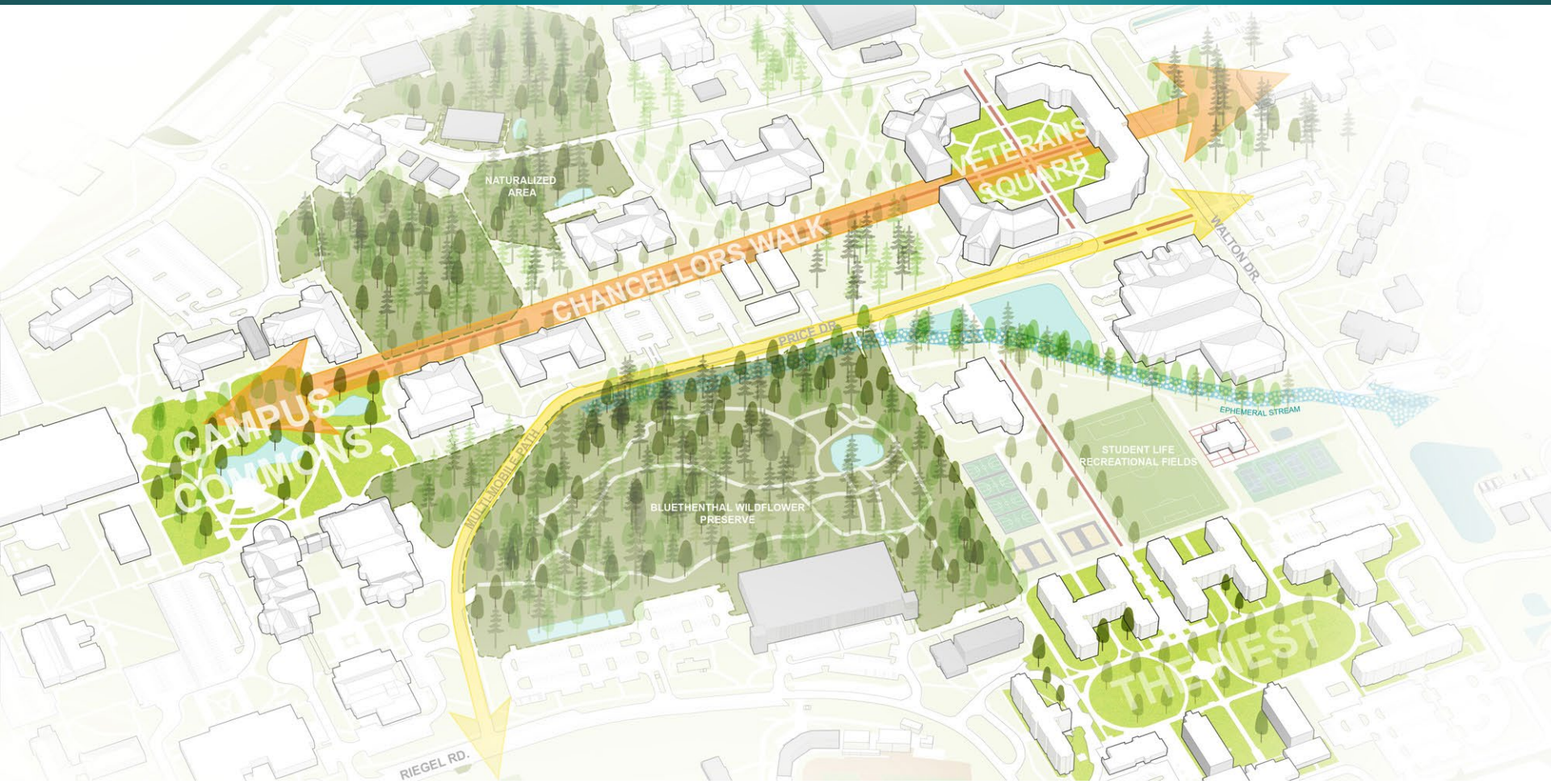




UNCW 2024 Campus Master Plan Process | Stakeholder Engagement

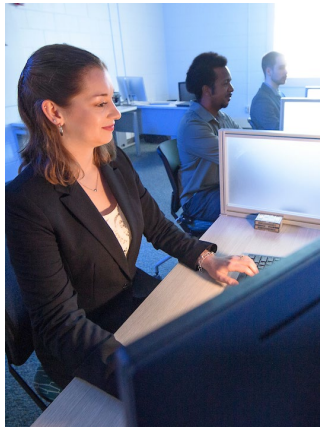


Imagine: UNCW in 2033



Campus and Community Engagement

- Purple Heart Designation
- “The Dub” Brew
- STEM designation for new programs
- Cybersecurity program joins Carolina Cyber Network
- Campus visit by NC Rep. Ray Pickett



Wings Up for Wilmington

UNCW 2023-24 Season

Chancellor's First Dare to Learn Lecture Scheduled November 6

Donna Brazile

Karl Rove

Part of the Campus Life Distinguished Lecture Series

State Budget Support

- 7% raises across the biennium for UNCW faculty and staff
- Recurring funding from the General Assembly for UNCW will exceed $198 million this year and over $200 million next year. Newly designated UNCW projects include, but are not limited to:
  - $8 million recurring to develop programs and services in critical workforce and research areas;
  - $14 million in repair and renovation (R&R) funds over the next two years for Cameron Hall, DeLoach Hall and Kenan Auditorium (reaching nearly $80 million over the next four years);
  - $14 million this year and $12 million next year for smaller R&R projects across our campus;
  - $500,000 recurring annually for a comprehensive transfer collegiate experience program to serve students with intellectual and developmental delays; and
  - $8 million in planning funds for a new academic building.
  - Sincerely appreciate the action and support from the General Assembly, the UNC System Office, the Board of Governors, alumni, faculty, staff, community partners and all of you.
  - Kudos to two fierce advocates for our university throughout the process: Mark Lanier and Marion R. Warren.

Building on a Strong Foundation

CROSS-CULTURAL CONNECTIONS

Commemorative artwork honoring the Indigenous peoples of southeastern North Carolina was unveiled in November 2022 in the Fisher Student Union.

Artist Jessica Clark, a member of the Lumbee Tribe of North Carolina, was commissioned to create the piece. "Honoring Southeast NC Indigenous Peoples" brings awareness to contemporary Native issues while celebrating perseverance and traditions.

The project is a collaboration between the UNCW Community Engagement and Impact, the Office of Institutional Diversity and Inclusion and several North Carolina tribal communities. The unveiling ceremony was preceded by an afternoon of performances highlighting Indigenous culture.

NCW'S STRENGTHS:

1 Community Engagement and Equity

2 Blue Economy, Coastal Resilience, Innovation and Entrepreneurship

3 Talent Pipeline Developed in Partnership with Surrounding Communities

mber 2022, UNCW became one of 80 higher education ons nationwide designated by the Association of Public d-grant Universities as an "Innovation & Economic ty University."

gnation acknowledges public research universities ith public and private sector partners in their states s to support economic development through a variety es, including innovation and entrepreneurship, y transfer, talent and workforce development, unity development.

In December 2022, UNCW received $1.1 million in federal funding to establish the Seahawk Upward Bound Math and Science Program, an intervention effort to help area high school students in math and science while supporting them to pursue college and careers in STEM.

Funded by the U.S. Department of Education, the Seahawk UBMS program is part of the federal TRIO Programs, outreach and student services initiatives designed to identify and provide services for individuals from disadvantaged backgrounds.

Also in December, UNCW partnered with Montgomery, South Piedmont and Richmond community colleges to establish a bachelor's degree pipeline for students to seamlessly progress into UNCW's Master of Social Work program.

ASIAN HERITAGE CULTURAL CENTER

UNCW's Asian and Pacific Islander students have a place to gather and find additional support and resources with the establishment of the Asian Heritage Cultural Center, one of four centers that provide an environment where Seahawks feel a sense of belonging and connection.

The AHCC officially opened in August 2022 as an inclusive space that supports students' engagement and facilitates connections across campus and in the community. It also provides co-curriculareducational programming that enriches the understanding of Asian American and Pacific Islander cultures and histories. The center is located in the Fisher University Union.

Members of the Asian Student Association petitioned and advocated for the space and worked with the Office of Institutional Diversity and Inclusion in its planning and opening.

UNCW.EDU/ASIAN-HERITAGE-CULTURAL-CENTER

Soar Higher Strategic Plan

Strategic Plan Handout

Envisioning the Future: Strategic Plan

Mission Statement

The University of North Carolina Wilmington, the state's coastal university, integrates teaching and mentoring with research and service. UNCW's commitment to student engagement, creative inquiry, critical thinking, thoughtful expression, and civic responsibility defines the student experience. Graduates of our undergraduate, master's and doctoral programs are prepared to serve the needs of local, state and global communities.

**Pending approval by the Board of Governors*

Vision Statement

UNCW transforms lives.

Envisioning the Future: Strategic Plan

- **U**nparalleled Opportunities
- **N**ationally Prominent Programs
- **C**ommunity Commitment
- **W**orld-Class Operations and Infrastructure

Strategic Plan in Action: New Academic Programs

Community Partnerships to Address Greatest Needs

The First Three Years

The university will begin by focusing on top priorities for the first three years.

First 3-Year Priorities

- Academic advising and student success
- Mental and physical health-related services and well-being
- Career readiness and services and high impact practices
- Faculty staff salaries and satisfaction
- New and relevant academic programs
- Partnerships with the local health community to expand health sciences

The First Three Years

Year 1 Priorities Requiring Additional Planning

- Strategic and master planning for academics, student life and athletics
- Critical facility upgrades based on campus master plan
- Data modernization initiatives
- Branding campaign highlighting coastal location

The First Three Years

Continuing Priorities

- Enrollment planning, financial aid optimization and affordability
- Students, faculty and staff diversity and a welcoming environment
- Community engagement
- QEP implementation/interdisciplinarity in pedagogy and research
- Enhanced affinity, philanthropy and advocacy
- Support for relevant research, innovation and commercialization
- Connect UNCW and Wilmington with the world
- Streamline policies and processes for effectiveness, efficiency, sustainability and transparency

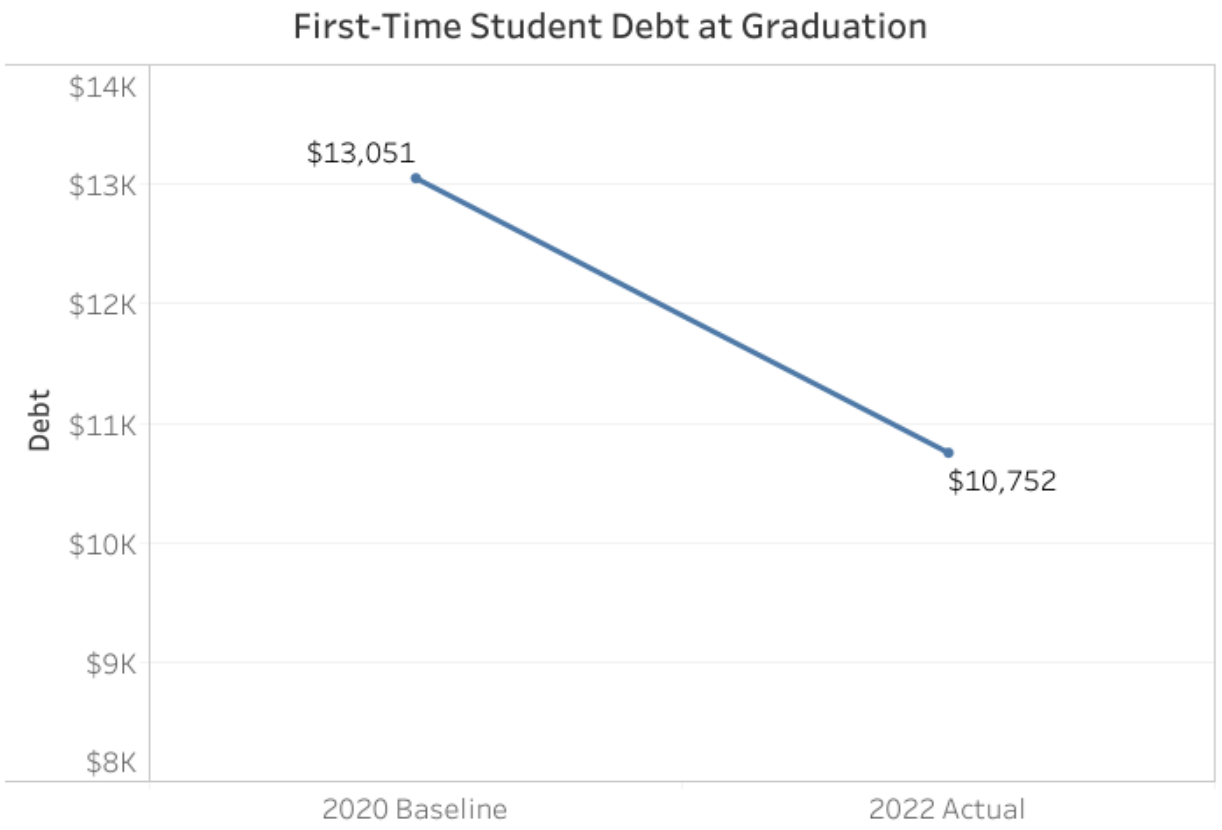
Checking Our Progress

We will monitor our progress with several metrics, including:

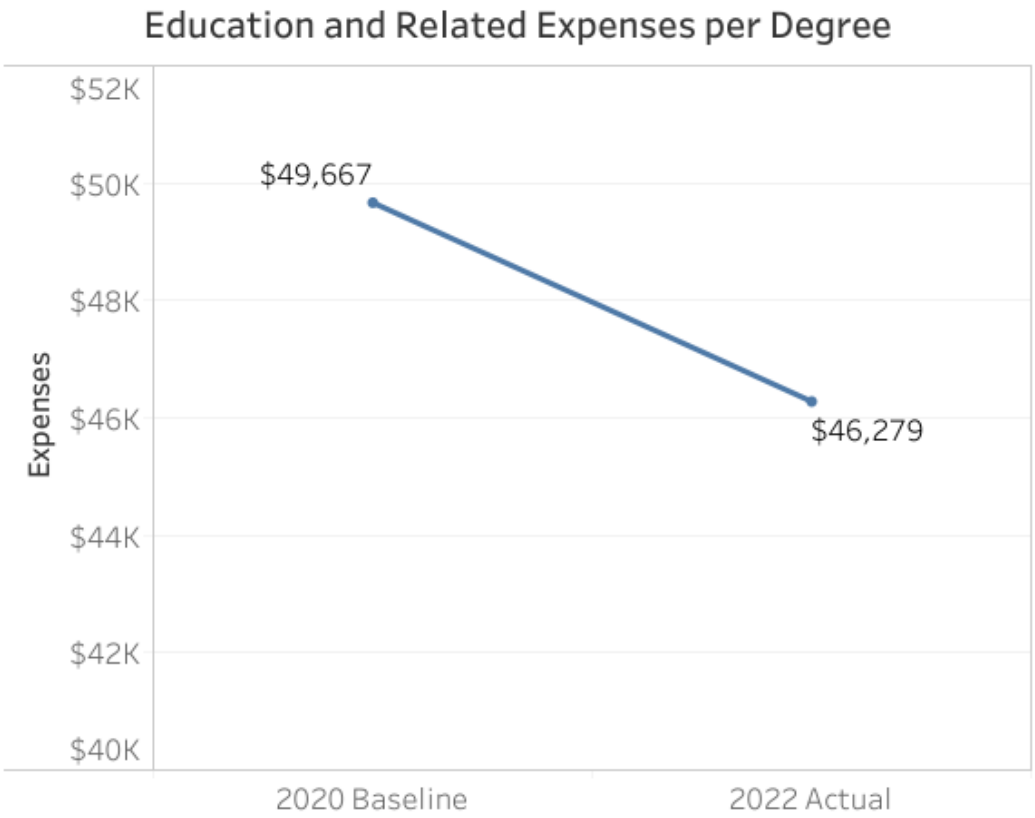
- Access: Enrollment of underserved populations (part-way home; military; 80 underserved counties) *
- Affordability: Student loan debt at graduation (first-time; transfer) *
- Student Success: Four-year graduation rate (aggregate; students of color; Pell recipients) *
- Career Readiness: Participation in High Impact Practices (HIPs)
- Career Readiness: First destination survey data
- Undergraduate degree efficiency*
- Employee salary/market data
- Voluntary faculty and staff turnover rates (combined; separate; minority; women) *
- Number of STEM and health sciences degrees*
- Sponsored research and licensing income*

**Also UNC System metrics.*

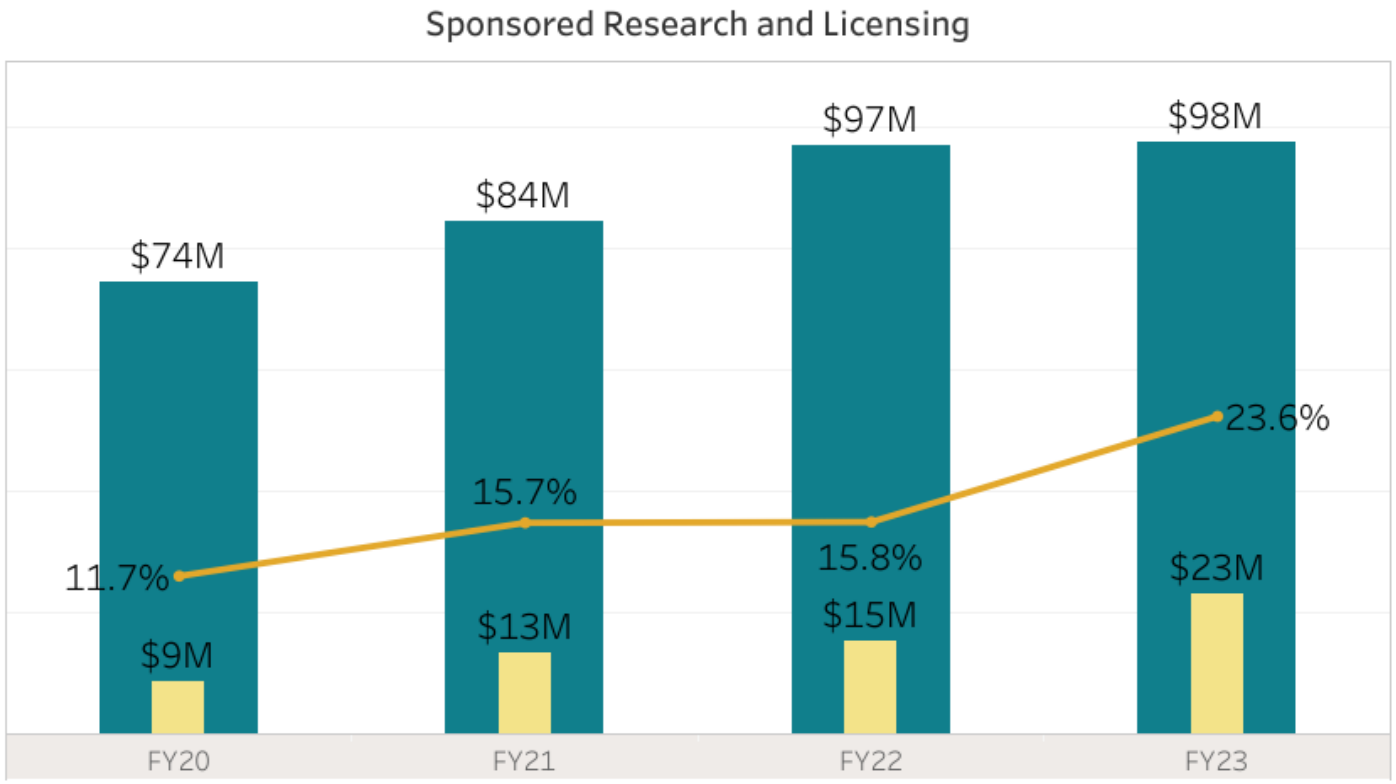
Checking Our Progress



Checking Our Progress



Checking Our Progress



Supporting the Success of Our Seahawks – Now and Always

Let's keep soaring together, Seahawks!