



Wilson College of Textiles

Office of the Dean

textiles.ncsu.edu

Campus Box 8301

1020 Main Campus Drive

Raleigh, NC 27695-8301

P: 919.515.6500

## Wilson College of Textiles Annual Report

July 1, 2020 to June 30, 2021

During a year of unprecedented change, the Wilson College of Textiles has come together as a team to support our mission, especially the success of our undergraduate and graduate students, as well as to support each colleague within the college.

Of course, the lives of everyone in the Wilson College community have been profoundly affected by the COVID-19 pandemic. And yet, we have made major progress in the past year in a number of key fronts by aligning our actions and resources around our revised strategic plan.

### Wilson College **Strategic Plan** Implementation

With the engagement of the Wilson College community, we have begun implementation of our revised strategic plan, fully in line with the new NC State Strategic Plan, and have identified projects to implement in FY22. Our Strategic Plan Implementation incorporates flexibility to adapt to our rapidly changing environment to address both challenges and opportunities, and will form the basis of future reports.

The plan includes our vision:

**A compassionate world in which textiles enhance sustainability and quality of life for all**

Our mission statement:

**We exist to advance the success of our students, and the textile industry in North Carolina, the U.S. and around the world, through teaching innovation, research excellence, strong partnerships and service.**

Our new core values:

**Compassion | Equity | Collaboration | Innovation | Sustainability**

And a focus on three strategic themes:

- **A hyper-collaborative culture rooted in equality of opportunity for all**
- **Sustainability in all of our work**
- **Enhance quality of life for all**

Also fundamental to our success is our [culture charter](#) that underpins our strategy. A key aspect of our effective operations the past 18 months has been risk management as a result of the COVID-19 pandemic.

### COVID-19 Risk Management

The leadership, staff and faculty have lived by each of our core values by supporting each other and especially our students. One of our most proud accomplishments: **we have no known transfer of COVID-19 virus as a result of operations within the Wilson College.** We have achieved this whilst maintaining operations to support our mission. We established our Pack Planning Team and communication protocol to respond to the pandemic. Our staff, faculty and students have generally felt supported throughout the pandemic with over 75% of staff and faculty reporting that they felt they received timely and accurate information and that the college leadership is effective in supporting the college community during times of crisis. Expenditure allocations to protect and serve our community have been significant with greater than \$210,000 of additional costs being incurred. The Wilson College is profoundly grateful to all who have supported the safety and well-being of our community: the chancellor and provost and the chancellor's cabinet, and our more than 1,300 donors and friends.

## Wilson Points of Pride

Despite the myriad challenges in adapting to the ever changing pandemic environment, we look back on with great Pack Pride in our accomplishments.

- Pride in having no known transfer of COVID-19 virus as a result of on-campus operations within the Wilson College, while maintaining full research and scholarship operations.
- Pride in launching 300 undergraduate, 51 master's and 25 doctoral graduates.
- Pride in supporting higher than the national average career and internship placement during the pandemic.
  - At least 80% of our May 2020 B.S. recipients were employed in a related field or were continuing their education within six months of graduation.
    - Of the 80%, 77% were employed in a related field within six months of graduation compared to 69% nationally.
    - Of the 80%, 23% were continuing their education.
- While data collection is still underway, 64% of May 2021 graduates have been successfully placed so far.
- Pride in maintaining a near record in graduation rates.
- Pride in maintaining a near record in first-year retention rates.
- Pride in continuing to strengthen our first need-based scholarship, the Textile Pioneers Scholarship Program, which is focused on students from rural North Carolina and/or first generation college attendees. We have raised more than \$6 million in less than three years.
- Pride in winning a high level of research awards. College submitted more than \$6.2 million in proposals.
- Pride in one of the highest levels of research and scholarship impact in our history with greater than 200 peer-reviewed publications and juried exhibits.
- Pride in delivering yet another record fundraising year of \$5.8 million (not including 2018 when the Wilson Family Endowment was established), thereby maintaining an average of over \$10 million raised each year in the last five years.
- Pride in establishing a record pipeline of more than 1,300 donors (>10% of all alumni | increase of >70% from five years ago).
- Pride in our alumni and friends who established a robust Student Emergency Fund: >\$20K.
- Pride in generating fabric to produce more than 200 million masks, including for the North Carolina hospital system, U.S. military and NC State personnel, via The Nonwovens Institute.
- Pride in celebrating 50 years since our first Ph.D. graduate (Dr. Joel Williams in 1971). A record enrollment of doctoral students.
- Pride in advancing the critically needed research and testing of personal protective equipment performance through the Textile Protection and Comfort Center and its partners.
- Pride in demonstrating support for our culture charter, including:
  - Establishing the Women of Wilson (WOW), in which all female employees in the college are welcome.
  - Providing multiple events for fellowship and to share and learn from each other during the year's historic cultural and pandemic challenges.
  - Running a well-attended book club on diversity, equity and inclusion.
  - Strengthening the Wilson College Diversity, Equity and Inclusion Committee charge with meaningful outcomes:
    - Enhanced diversity in the student body, staff, faculty and NC Textile Foundation Board, through intentional recruiting protocols
    - Majority female tenured/tenure-track faculty members for the first time (56%)
    - Record number of female full professors (31%)
    - Record number of Asian faculty members
    - Majority female students, all majors, all levels
    - Record number of Black or African-American graduate students
    - One of the highest number of females on a board at NC State (from <10% five years ago to 38%)
- Pride in establishing a strong Warm Wilson Welcome onboarding process for all new employees.

- Pride in the awards and recognitions of our students, including:

**Undergraduate awards include:**

- Suh Hee Cook, Society for Biomaterials three-minute thesis finalist, under the direction of Jessica Gluck.
- Ava Armstrong and Deja Herelle won a FSF Case Study Scholarship program.
- Taylor Williams (Fashion and Textile Design) was selected to participate in the Bienenstock Future Designers Summit, which will take place in September 2021.
- eGames Do Category 1st place – \$9,000 | Vertibra: A smart bra designed with wireless sensors to engage back muscles as well as promote dynamic correction and muscle memory. Team members: Bryson Boettget, Daniel Olson, Jeanine Fry, Marta Pasqualini
- Carter Davenport, Spring 2021 Undergraduate Research Award
- Denisse Sada-Romero, Summer 2021 Undergraduate Research Award

**Graduate awards include:**

- J'den Williams and Dakota Batch - Extruo, won the IBM Built on Cloud Impact Award, the Design and Prototype Impact Award (\$2,000 each) and 2nd place in the Do Category (\$8,500) at eGames.
- Shahida Afrin, Ph.D. student (Textile Technology Management), her team won the "Connected Community Challenge" at the Kent State University Fashion Tech Hackathon, 2021.
- 2021 eGames two finalists teams led by current and former textiles graduate students: Jeanine Fry, M.S.; Dakota Batch, Ph.D. in TTM; J'Den Williams, Ph.D. in TTM; Victoria Luong Vu, M.S (graduate).
- Daeun (Chloe) Shin, TTM student and Lori Rothenberg won the ITAA 2020 Paper of Distinction Award; in the Merchandising/Retailing II Marketing track.

**Staff and faculty awards include:**

- Xiaomeng Fang, NC State Inaugural 2021 Strengthening The Impact of Research Scholars
- Ericka Ford, Goodnight Early Career Innovators Award
- Wei Gao, University Faculty Scholar
- Sophie Guevel, Outstanding Extension Award
- Bailey Knight and Jeff Sackaroff, NC State Awards for Excellence
- Heather Lyerly, Carrie McLean Award and NACADA Outstanding Advising Award Certificate of Merit recipient in the Administrator category
- Bryan Ormond, 2021 Alumni Association Outstanding Teacher Award | NC State Outstanding Teacher Award, University | NC State Academy of Outstanding Teachers
- Xiangwu Zhang, Research Leadership Academy

**Culture Charter**

This past year, the Wilson College demonstrated living by its recently adopted [culture charter](#) in meaningful ways that are helping to create a welcoming college with strong feelings of belonging and a demonstrated commitment to equity. The following are some key highlights. The Women of Wilson (WOW) program was established under the leadership of Associate Dean Pamela McCauley to help build a community of support for all women in the college. The college held multiple virtual Town Halls, Advance meetings, college-wide Pack Planning Team meetings and Coffee and Tea with the Dean meetings. These meetings fostered deep and respectful listening and sharing sessions regarding national racial unrest in support of our Black or African-American, Asian and other communities (for both colleagues and students), as well as candid discussions of concerns around COVID safety and serving our students. The college began implementing a professional development roadmap for all employees, as well as a new architectural master plan with the goal of establishing new collaborative spaces that showcase the excellent work of our students, staff and faculty and promote collegiality, partnership and creativity. We have also established a comprehensive Warm Wilson Welcome virtual onboarding process.

Select goals for FY22 include:

- Enhance leadership and resource transparency and accountability by implementing focused “360” assessments of all unit leaders in FY22 and Advance meetings centered on transparency in budgeting and other resources
- Provide increased resources to enhance professional development, well-being, collegiality and pride.
- Establish professional development roadmaps for >50% of Wilson College colleagues.

### **Student Success**

Student success has always been our number one goal beyond safety and well-being of all community members.

Wilson College has been able to maintain a strong academic program throughout the pandemic, including:

- Maintaining a near record in graduation and retention rates.
- Raising \$6 million within three years to establish Wilson College’s first need-based scholarship program: Textile Pioneer Scholarships.
- Raising and maintaining a robust Student Emergency Fund: >\$20K.
- Successfully managing virtual graduations and celebrations.
- Supporting graduates in finding full-time employment and internships as part of our Wilson for Life initiative (with placement rates far higher than the national average, year-on-year).
- Developing Wilson College’s first 2+2 program with Gaston College and Catawba Valley Community College.
- Investing in the new Flex Factory to serve entrepreneurs and industry (for all students, staff, faculty and external partners).

Select goals for FY22 include:

- Provide the safest possible fully on-campus educational, research and mentoring experience for all students.
- Work towards establishing a living wage stipend for doctoral graduate students, as well as tuition coverage.
- Establish a robust pandemic-informed recruitment strategy for both undergraduate and graduate students.
- Design and implement a comprehensive distance education strategy to raise revenues, support recruitment and retention of students, and serve the global textile community.
- Open and staff the Flex Factory to serve all students and other stakeholders.
- Reduce the overwhelm of staff and faculty by enhancing resources in advising and teaching.

The college is increasingly utilizing philanthropic discretionary funds (see philanthropy section below) to fund strategic areas of need, especially where staffing is highly limited, as well as basic operations, including:

- A full-time recruiter to assist with rural, first generation and diverse student populations.
- A communications specialist to support our marketing and communications plan.
- Partial salaries for our academic programs staff (approximately 50% of staff).
- Our Summer Textile Exploration Program for high school student recruitment.
- All our IT/networking fees.

These expenditures using private funds are just a fraction of the incredible impact that the Wilson Family gift and many other discretionary gifts are having on the Wilson College.

### **Research and Interdisciplinary Scholarship**

Despite major changes in personnel, the Wilson College Research Office had a very successful year focused substantially on our effective research restart during summer 2020, as well as maintaining support for faculty in proposal development, compliance and administration. In addition to the pride points above, notable achievement in research outcomes include:

- 114 Technical Service Agreements or Fabrication Service Agreements (\$2.8 million).
- Distinguished faculty received a record in supplemental funds from endowments: \$482K (Wilson College has the most distinguished faculty per tenured faculty on campus).
- Provided junior faculty research proposal development support.

- Conducted a virtual Research Open House, led by the Textile Association of Graduate Students.
- Managed the Research Resources website to enhance proposal development, pre-award and post-award services.
- Maintained funding opportunity search and proposal development services to enhance faculty research programs.
- Led the research restart approval and on-site visitor approval processes to ensure continuous research operation during the COVID-19 pandemic.

Key Research and Scholarship Goals for FY22 include:

- Maintain a safe research environment.
- Implement a comprehensive research strategy centered around Wilson College's three strategic themes with a focus on larger proposals and interdisciplinary research.
- Assist in the establishment of the Flex Factory to support research, innovation, creativity and entrepreneurship.

### **Philanthropy**

Wilson College continues to work to reduce its reliance on state funds. Despite the challenges of the pandemic, many records were broken once again, including:

- A record endowment of \$82 million (an increase of 95% from five years ago).
- A record \$5.8 million in cash and pledges (not including 2018 Wilson family gift, and an increase of 280% from five years ago).
- A record pipeline of donors: 955 households (~1,300 donors and >10% of all alumni, and an increase of >70% from five years ago).
- Grew Dean's Young Alumni Leadership Council to 30 diverse alumni across the U.S. and held more than 30 virtual alumni events, most very well attended.

Select philanthropic goals for FY22 include:

- Raise more than \$4.8 million in gifts and pledges.
- Become known as a model college fundraising team.
- Endow 16 Textile Pioneers by the end of the Campaign.
- Grow the NC Textile Foundation endowment beyond \$90M.
- Maintain or increase donor pool of 1,300 donors.

### **Extension and Service**

Our Zeis Textile Extension department is a unique unit that serves all of our students and faculty in their research endeavors, as well as hundreds of small and large industry partners, including entrepreneurs. Major accomplishments for ZTE in FY21 include:

- In collaboration with TATM and NWI, ZTE provided significant support to NC State and Wilson College through the production of masks, which were used by housekeeping, public safety and EH&S in summer 2020.
- ZTE provided education and training of students in formal classes, laboratories and studios at zero cost to the academic departments (approximately \$320K in personnel support costs alone).
- Collaborated with the College of Agriculture and Life Sciences in establishing the new Hemp Consortium.
- Won four STTR technology transfer grants to support hemp research and development.
- Funded two doctoral and two master's students.
- Established a new program in collaboration with IES as part of their Manufacturing Extension Partnership (MEP).
- Led a PPE manufacturing workshop series with >900 participants in partnership with multiple industries, nonprofits and the College of Sciences faculty.

- Won a Department of Defense contract in partnership with Gaston College, Catawba Valley Community College and IES, called Weaving a Talent Ecosystem in North Carolina.

Select Goals for Zeis Textiles Extension for FY22 include:

- Diversify and grow revenues by building on the new FY21 strategy of revenue generation from federal and state agencies.
- Lead the establishment of the Flex Factory within the ZTE labs.
- Assist in the establishment of new 2+2 academic programs with community college partners: Gaston College and Catawba Valley Community College.
- Collaborate with CALS and other colleges in innovation on sustainability, especially hemp production and technology.
- Collaborate with COE in the MEP led by IES.
- Collaborate with our academic programs unit (ACSS) in implementing a DE strategy, including development of a badge/certification program.

### **Barriers, Challenges and Opportunities for Wilson College in FY22**

The pandemic has shown the critical importance of textiles to our safety and well-being. Myriad opportunities exist both locally and globally with respect to the impact that textiles can have on society. The most significant barriers include:

- Feelings of overwhelm as we are understaffed (including high teaching loads of research-active faculty).
- Recruiting and retaining top staff and faculty with attractive compensation and benefits.
- Investment in building and equipment infrastructure is required to remain competitive in research.
- Increasing doctoral student stipends.

With enhanced investment in state and non-state resources, Wilson College will maintain its reputation as the premier textiles institution in the world.

### **Select Goals for FY22**

Some of our goals for the 2021-2022 academic year, include:

- Maintain zero COVID virus transfer in FY22 from within the Wilson College.
- Complete our Wilson College Strategic Plan Implementation program.
- Launch the first Wilson College 2+2 degree program with Gaston College and Catawba Valley Community College.
- Launch a Wilson College Building Future Faculty program.
- Establish the Wilson College Flex Factory.
- Continue to build on results of the UNC System Employee Engagement Survey as part of our culture charter.
- Raise >\$4.8 million in private donations and maintain record number of donors.
- Surpass our FY21 research awards by 20% and substantially increase doctoral student stipends.
- Complete planning and begin implementation of the Wilson College Architectural Master Plan.
- Ensure that students feel and are fully supported for on-campus curricular and extracurricular educational and research experiences.
- Ensure the majority of colleagues are working on campus most of the time, and work permitting, feel they are empowered with flexible work schedules to handle extenuating personal circumstances.
- Foster feelings of safety, well-being and belonging for all Wilson College community members.