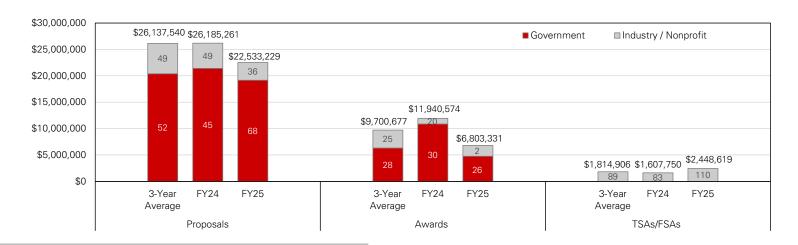
Wilson College of Textiles

Textiles Research Newsletter

The research programs in the Wilson College of Textiles at NC State University are innovative, life-saving, creative, global and thriving. The college also provides tech service to all stakeholders and supports the economic development of the State and beyond. This newsletter gives a brief overview on the research and tech service activities of the faculty, staff and students during the fourth quarter of Fiscal Year 2025.

FY25 vs. FY24 vs. Three-Year Average (Q1 - Q4)



NUMBERS TO DATE (FY25 Q4)

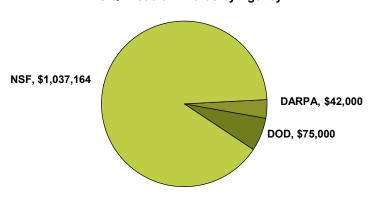
Research Awards Received (\$1,839,878)

- Federal: \$1,154,164 | DARPA, DOD, NSF
- Industry/Nonprofit: \$685,714 | Apani Labs, KITECH, North Carolina Biotechnology Center, SCRIF, The Nonwovens Institute

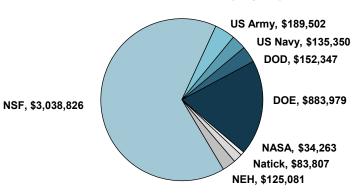
Research Proposals Submitted (\$5,639,964)

- Federal: \$4,643,155 | DOD, DOE, NASA, Natick, NEH, NSF, US Army, US Navy
- Industry/Nonprofit: \$996,809 | American Chemical Society, Apani Labs, Burroughs Wellcome Fund, Homeworld Collective, Lion Group Inc., NC Innovation

FY25 Q4 Federal Awards by Agency



FY25 Q4 Federal Proposals by Agency



NUMBERS TO DATE (FY25 Q4) Cont.

Inter-college Research Proposals (5)

 Wilson College share: \$370,650 | With CALS, CHASS, COE, COS Inter-dept./unit Research Proposals (5) \$655,285 Inter-dept./unit Research Awards (1) \$150,000

Graduate Student Support

- 60 Ph.D. Student RAs (Avg Stipend: \$24,183 / year)
- 13 M.S. Student RAs (Avg Stipend: \$22,230 / year)

RESEARCH AWARDS AT OR ABOVE \$50,000 (FY25 Q4)

- Rong Yin, NSF CAREER, \$500,000.
- 2. Yang Zhang, NSF CAREER, \$487,164.
- 3. Eunkyoung Shim, Sonja Salmon, KITECH, \$288,496.
- 4. Jessica Gluck, Xiaomeng Fang, Karen Leonas, Kavita Mathur, Thomas Schroeder, and Jialong Shen, SCRIF, \$150,000.
- 5. Ericka Ford, and Januka Budhathoki Uprety, Apani Labs, \$99,698.
- 6. R. Bryan Ormond, BioInterphase (DOD), \$75,000.
- 7. Eunkyoung Shim, and Sonja Salmon, NWI, \$59,966.
- 8. Ericka Ford, NSF, \$50,000.
- 9. Eunkyoung Shim, and Mengmeng Zhu, NWI, \$58,488.

RESEARCH HIGHLIGHTS

The Wilson College Strategic Collaborative Research and Innovation Fund (SCRIF) intends to support strategic research and innovation initiatives that help Wilson College to remain globally competitive, to secure and nurture research leadership, to enter new research areas. SCRIF fosters collaborative efforts among faculty from different departments/units and disciplines within Wilson College that lead to sustained interdisciplinary research programs and projects. This competitive funding opportunity helps identify areas of Wilson College interdisciplinary strengths that present opportunities for cross-department/unit collaboration and sustainable future external funding. The following project was selected by the College Research Committee for funding in spring 2025 (\$150,000 for three years).

FIBER: Fibrous Integrative Biomaterials Education and Research (Jessica M. Gluck, Xiaomeng Fang, Thomas B. H. Schroeder, Kavita Mathur, Karen K. Leonas). Wilson College is poised to become a destination research hub for the development and usage of fibrous biomaterials. Several Wilson research teams have worked on the development of various biomaterials and textiles used in biomaterials applications leveraging the fiber's unique advantages to fulfill the requirements of the specific uses. In this SCRIF project, Dr. Jessica Gluck and her team aim to take advantage of their recent advances in 3D hydrogel-printed filaments for corneal regeneration. Recognizing an ongoing urgent need for to accelerate and sustain a biomaterials research legacy within Wilson College, therefore, the team will focus on two key objectives for this project: 1) development of 3D printed fibrous scaffolds for corneal tissue engineering, and 2) establishing a collaborative research community to create the infrastructure and curriculum for a research training grant, specifically aimed to support graduate students to build a sustainable pipeline of biomaterials research.

