

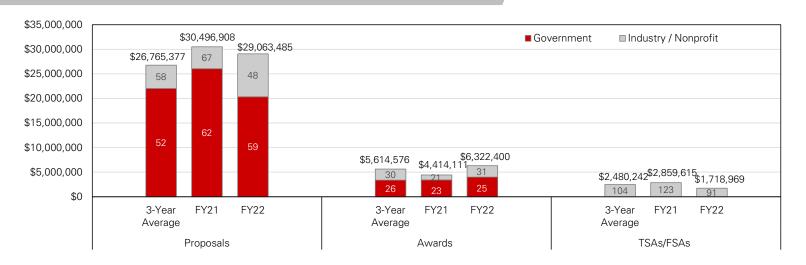
Wilson College of Textiles

Textiles Research Newsletter

FY22 Q4 | April 1 to June 30, 2022

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 2022.

FY22 vs. FY21 vs. Three-Year Average (Q1 - Q4)

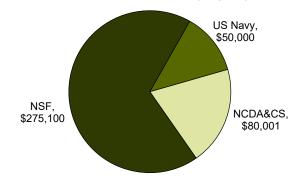


NUMBERS TO DATE (FY22 Q4)

Research Awards Received (\$903,621)

- Federal: \$405,101 | NCDA&CS, NSF, US Navy
- Industry/Nonprofit: \$498,520 | American Heart Association, Kanda Industries LLC, KITECH

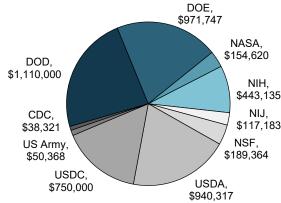
FY22 Q4 Federal Awards by Agency



Research Proposals Submitted (\$5,850,280)

- Federal: \$4,764,055 | CDC, DOD, DOE, NASA, NIH, NIJ, NSF, USDA, USDC, US Army
- Industry/Nonprofit: \$1,086,225 | Academy of Finland, Burroughs Wellcome Fund, Ewing Marion Kauffman Foundation, FRPD, KITECH, National Endowment for the Arts, NWI, SCRIF, Solib Solutions LLC, United Soybean Board

FY22 Q4 Federal Proposals by Agency



NUMBERS TO DATE (FY22 Q4) Cont.

Inter-college Research Proposals (7)

- Wilson College share: \$2,175,061
- With CALS, CNR, COE, COS, PCOM, The Science House

Inter-college Research Awards (4)

- Wilson College share: \$405,101
- With CALS, COE, COS, The Graduate School

Inter-department/unit Research Proposals (3) \$1,540,317

Inter-department/unit Research Awards (1) \$95,018

Graduate Student Support

- 66 Ph.D. Student RAs (Avg Stipend: \$18,341 / year)
- 17 M.S. Student RAs (Avg Stipend: \$14,328 / year)

RESEARCH AWARDS AT OR ABOVE \$50,000 (FY22 Q4)

- 1. Rong Yin, Kanda Industries, LLC, \$251,899.
- 2. Jessica Gluck, American Heart Association, \$231,000.
- 3. Marcia Gumpertz, David Shafer, Maureen Grasso, National Science Foundation, \$150,849.
- 4. Marcia Gumpertz, David Shafer, Maureen Grasso, National Science Foundation, \$124,251.
- 5. David Suchoff, Andre West, NC Department of Agriculture & Consumer Services, \$80,001.
- 6. Philip Bradford, Kara Jo Peters, US Navy-Office of Naval Research, \$50,000.

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 first call for proposals was released in Spring 2022, and the College Research Committee selected the following project for funding (\$150,000 for three years).



Accelerating Hemp as a Valuable and Sustainable Domestic Textile Fiber (Sonja Salmon, Rong Yin, Andre West, and David Suchoff). Domestic industrial hemp fiber production for textiles is an exciting opportunity that could help develop hemp as a sustainable new commodity crop for North Carolina, if the fiber can be processed to the right quality. Bottlenecks in selecting, growing and harvesting hemp are being addressed by the agricultural community, but this will not directly solve the critical issue for textiles, which is to obtain hemp fiber of specific controlled lengths. Equally important is the characterization and grading of hemp fiber quality to match staple production requirements. Professors Sonja Salmon, Rong Yin and Andre West (Textiles) and David Suchoff (Crop Sciences) are collaborating across campus and externally to help overcome these challenges by developing modern measurement methods, characterization techniques and sustainable processing approaches. Innovation with this "new" textile fiber matches our focus on sustainability and fits exactly with the fundamental research and education mission of our university.