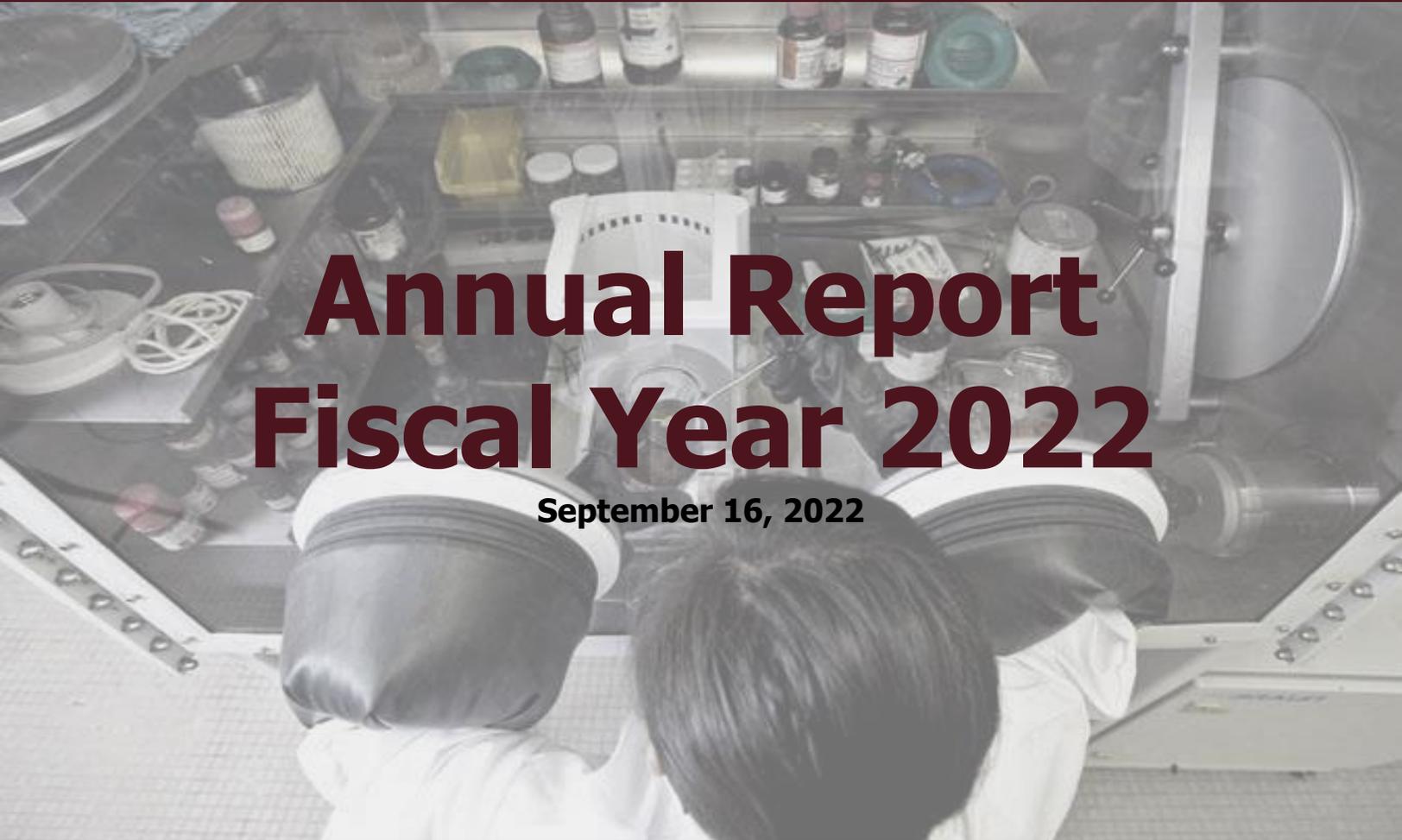


**Eastern Kentucky University
Division of Sponsored Programs**



**Annual Report
Fiscal Year 2022**

September 16, 2022

EKU
SPONSORED PROGRAMS

STAFF

DR. RYAN BAGGETT
Dean of Graduate Education and Research

GUS BENSON
Director

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Associate Director

LISA ROYALTY
Research Compliance Coordinator



MISSION

The mission of the Division of Sponsored Programs is to provide support for faculty and staff in the pursuit of external funding while assuring compliance with applicable regulations.

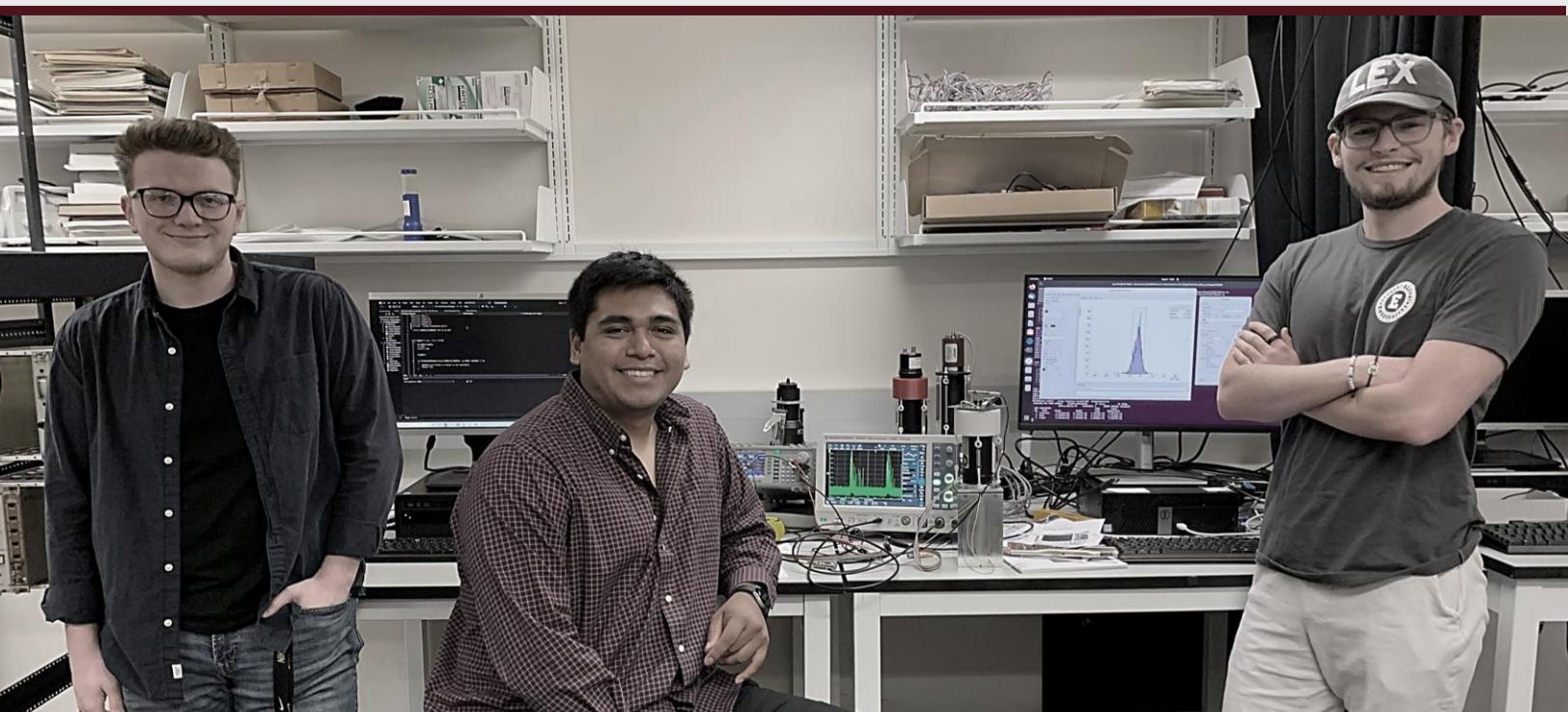
Sponsored Programs provides technical and compliance assistance in the following areas: identifying potential funding sources; developing proposals and budgets; facilitating compliance with federal, state, sponsoring agency, and University regulations; completing electronic applications; submitting proposals to sponsoring agencies; negotiating contracts and other award agreements; accepting award documents; administering post-award non-accounting issues, including subawards, award modifications, no-cost extensions, and budget revisions; administering the Institutional Review Board for the protection of human research subjects; administering the Institutional Animal Care and Use Committee; and administering internally-funded grant programs.

Introduction

Sponsored Programs is pleased to share our annual report for the 2022 fiscal year. There were 135 active sponsored project awards during the fiscal year, and ECU faculty and staff secured 71 new awards totaling \$29,386,651 in new external funding. While new funding is significantly lower than reported for FY 2021, the difference is minimal after adjusting for the \$54 million the University received in COVID-19 aid for institutional and student support in the prior fiscal year.

The University transitioned out of several agreements funding the provision of administrative services on behalf of the state prior to and during FY 2022. These efforts represent a shift in the sponsored project enterprise at ECU to one that prioritizes programs supporting research and student experiences. In addition to the successful transition of administrative agreements, we are pleased to report that the number of research awards increased by 61% in FY 2022 from the prior year. For the upcoming fiscal year, Sponsored Programs will focus on building an infrastructure to support faculty and staff in managing sponsored project awards. Plans include developing a strong collaborative network of support, the development of new resources, and the provision of technical assistance for post-award tasks.

As you read through this report, please join us in celebrating the faculty and staff whose efforts are represented and the impact those efforts have made on the campus community and beyond. We look forward to expanding our services in the upcoming year to better support ECU's mission and hope to see more faculty and staff engage with externally-sponsored projects.



Dr. Jason Fry (Physics, Geosciences, and Astronomy) received National Science Foundation research funding that includes student involvement. Above, students David Slone, Axel Quintanar-Pena, and JT Mills take a break from lab work to pose with a digital signal processing station for developing open field programmable gate arrays data acquisition and fast detector timing studies.

FY 2022 by the Numbers



\$29
million in funding
on new awards



71
new awards



115
proposals
submitted



61
project directors
on new awards



16
first-time project
directors



82
proposal
submitters



160
human subjects
research protocols



9
animal use
protocols



26
first-time proposal
submitters



8
university-funded
scholarship grant
awards

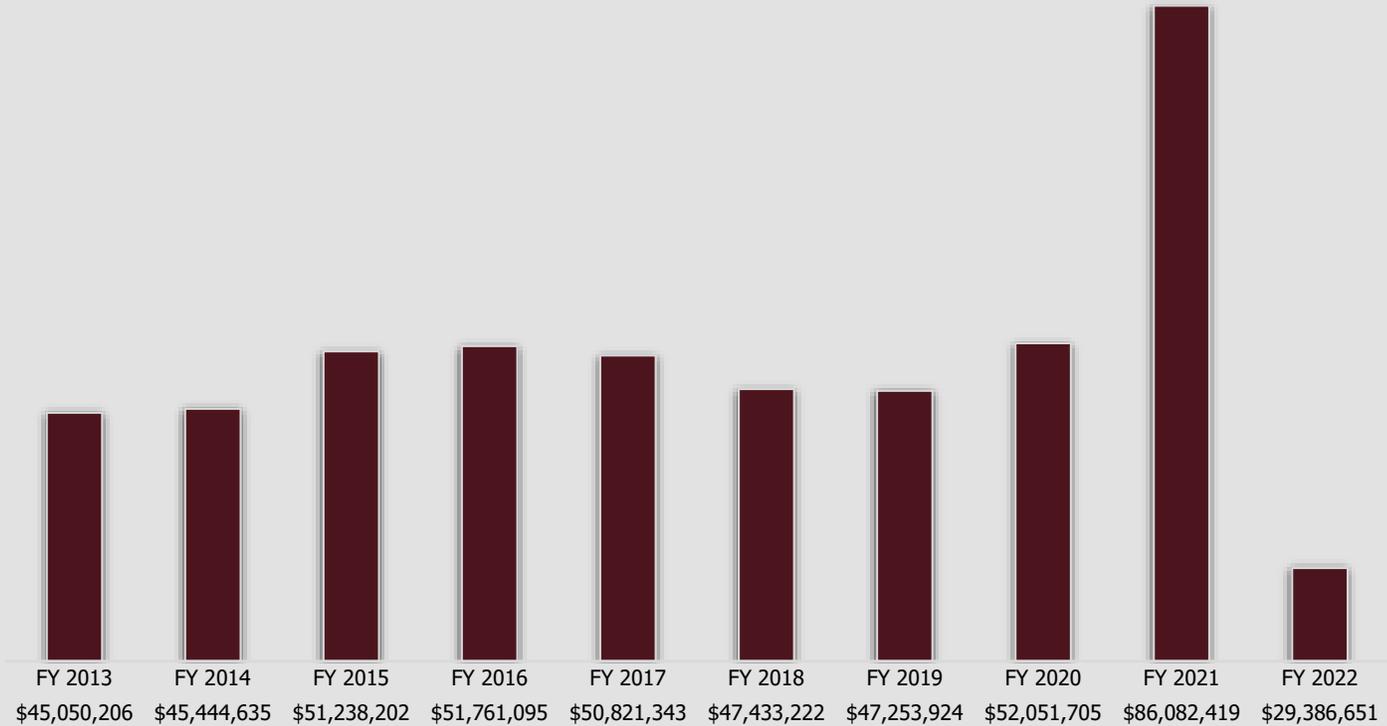


SPONSORED PROGRAMS

Historical Comparison of Funding and Awards

Sponsored project funding on new awards totaled \$29,386,651¹ for the 2022 fiscal year. The chart below illustrates the funding trend over the last ten years. While new funding is significantly lower than in the prior fiscal year, the amount represents a minimal decrease after adjusting for the infusion of more than \$54 million² awarded for institutional and student support through special funding allocations related to the COVID-19 pandemic.

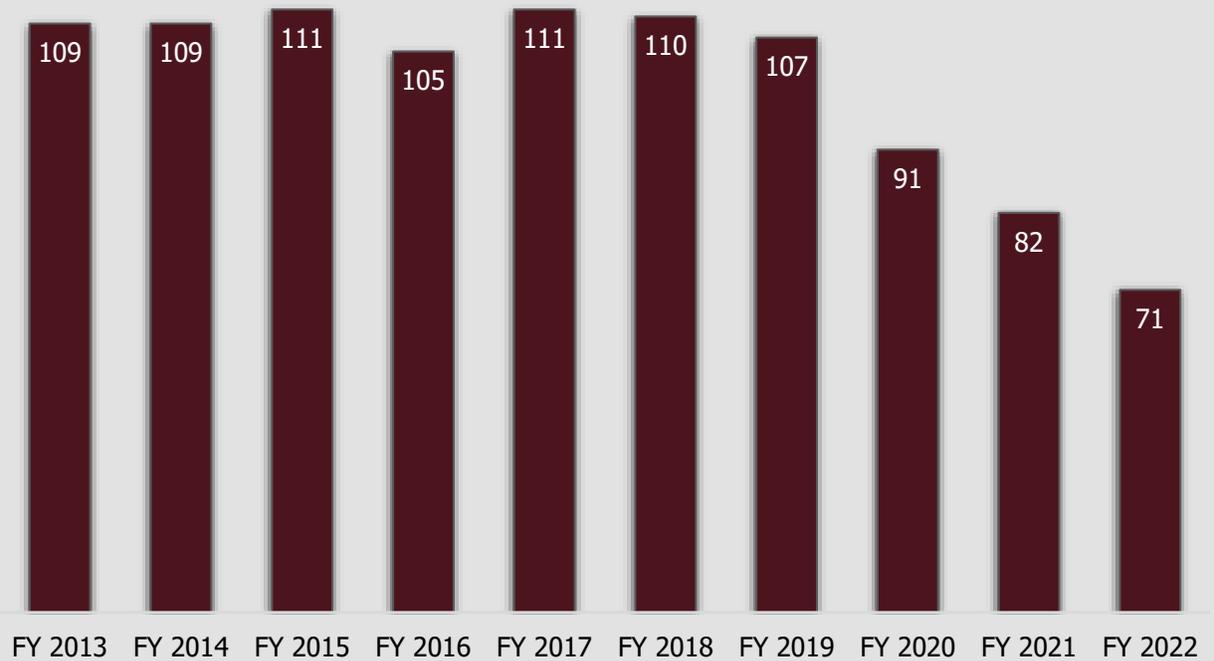
Total Funding by Year



¹ The dollar amounts included in this report reflect new awards received with start dates that fall between July 1, 2021 and June 30, 2022 and may not reflect additional funding awarded on awards with original start dates prior to July 1, 2021.

² FY 2021 funding included \$54,190,567 in institutional and student support funding related to the COVID-19 pandemic.

Number of Awards by Year



Compared to a ten-year average of 101 new awards per fiscal year, 71 new awards began in FY 2022. In part, decreases in the last three fiscal years resulted from the University's intentional discontinuation of several programs.

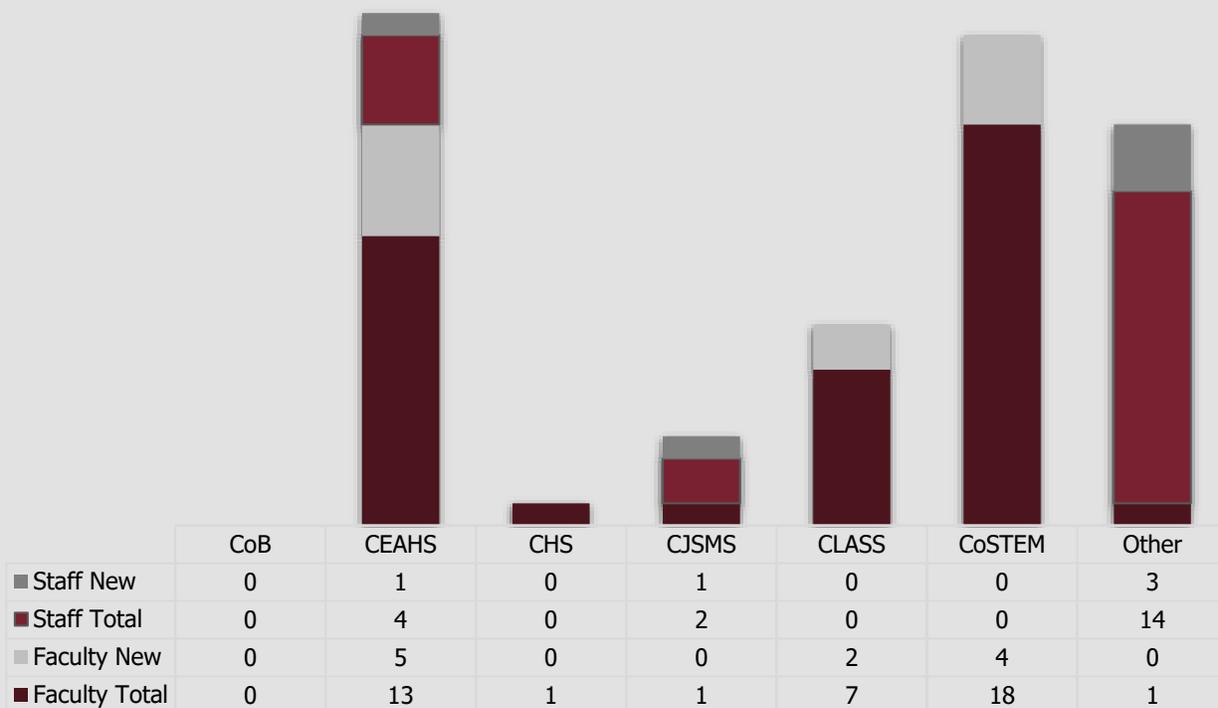


Dr. Valerie Peters (Biological Sciences) received a CAREER award from the National Science Foundation for research on tropical mutualistic network science and tropical bees. At left, an undergraduate student she mentors is collecting wild bees from banana flowers in a coffee agroforest.

Project Directors on New Awards

Forty-one (41) faculty and 20 staff served as project directors³ on 71 separate new awards that began during the 2022 fiscal year. Eleven (11) faculty and five (5) staff served as first-time project directors. The chart below illustrates the number of faculty and staff project directors on new awards by college.

Project Directors on New Awards

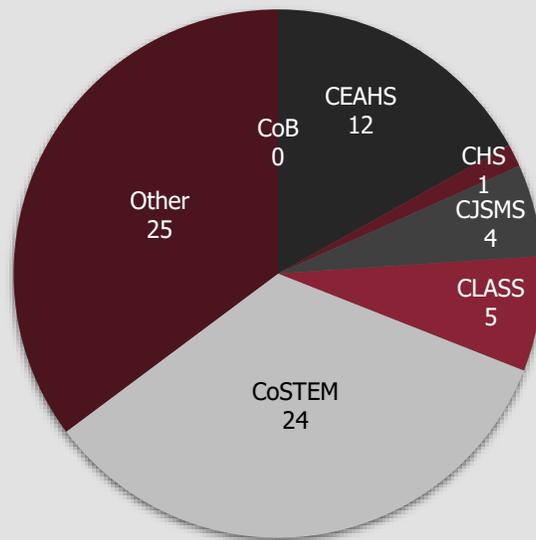


³ Counts include both project directors and co-project directors.

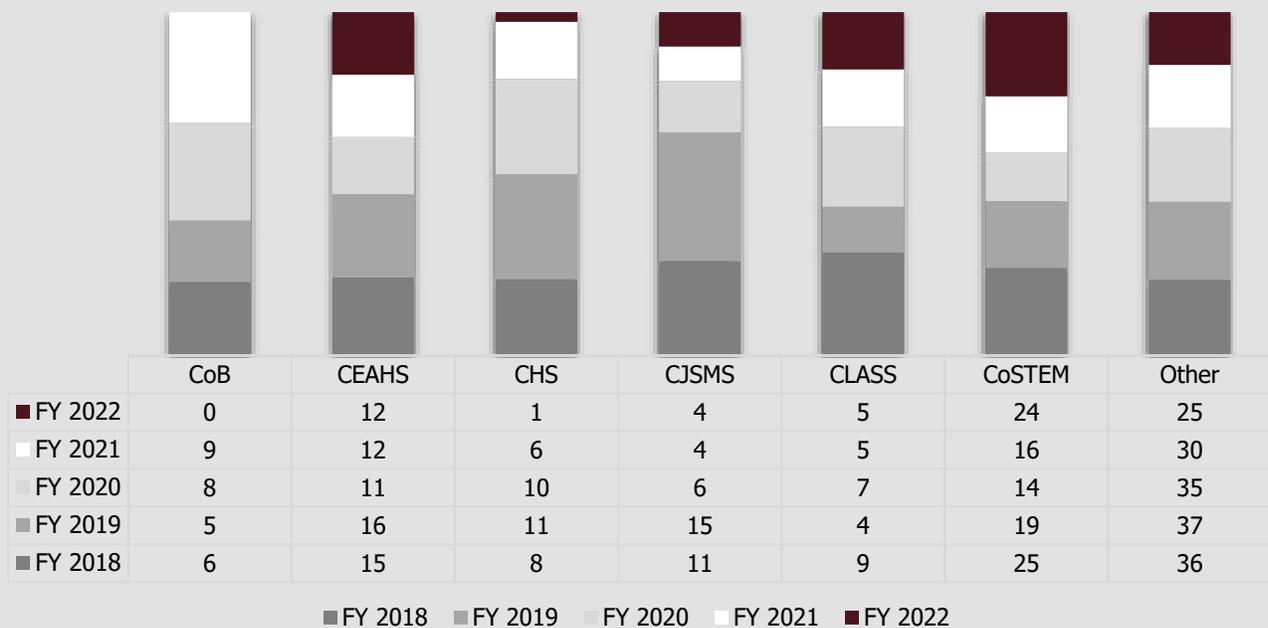
Awards by College

The University received 71 awards that began in FY 2022. The number of awards for each college is reflected in the graph below with the five-year trend illustrated in the chart that follows.

Awards by College

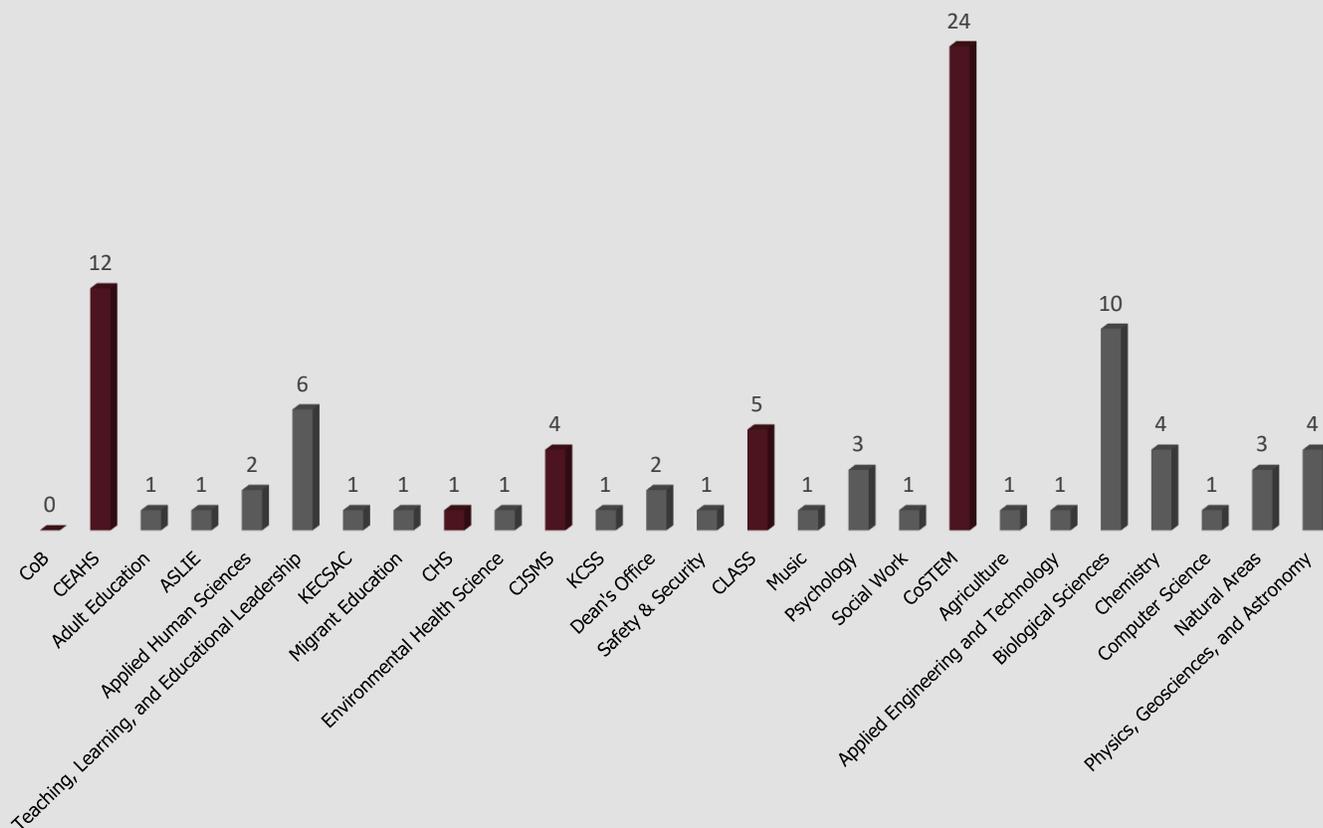


Awards by College: Five-Year Trend



The graph below reflects the number of new awards by academic department within each college with the college's total number of new awards in maroon. For projects that include a project director and co-project director(s) from different departments, awards are reported for the project director's department. Units outside the colleges are not included.

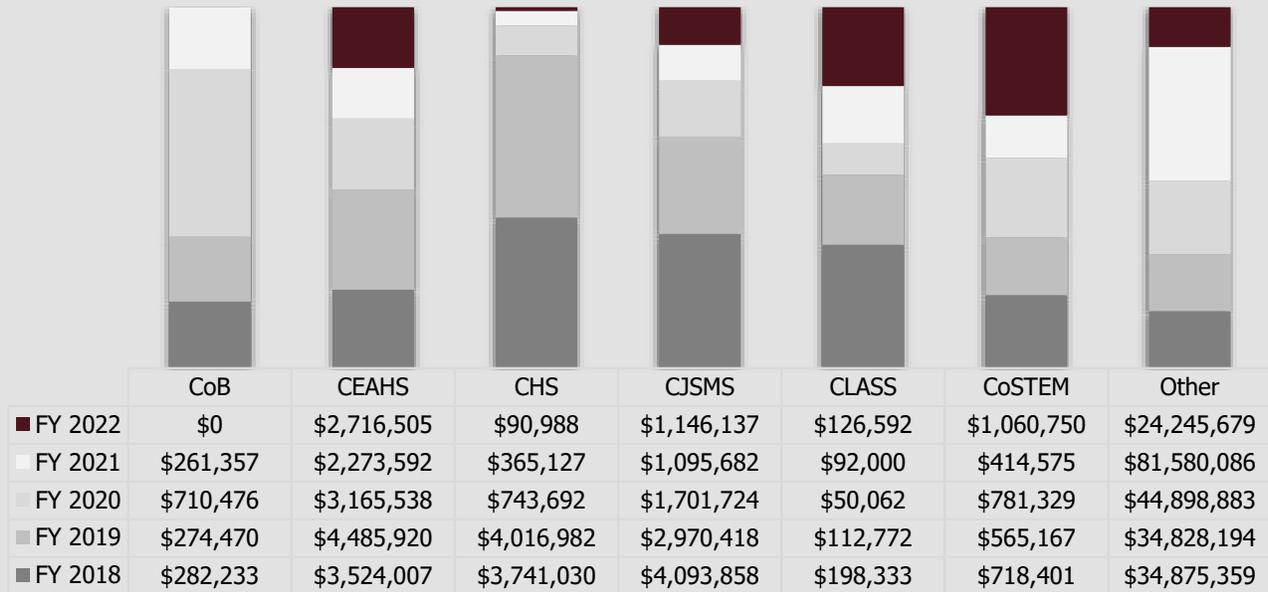
Number of Awards by Department



Funding by College

The chart below reflects the total amount of funding by college for the past five fiscal years.

Funding by College: Five-Year Trend



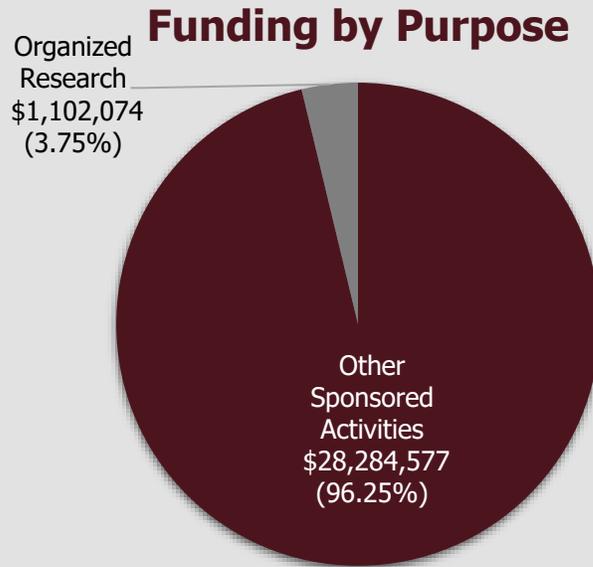
*The decrease in CoB funding resulted from the transition of two departments to CoSTEM.



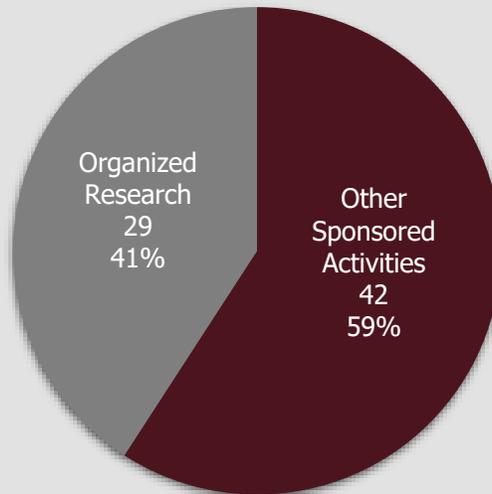
Dr. Luke Dodd (Biological Sciences) was awarded grant funding from the University-Funded Scholarship program. Graduate student, Makayla Beckner, is studying the occupancy of Allegheny Woodrats at EKU's Lilley Cornett Woods and along the Pine Mountain Wildlands Corridor as part of a faculty-mentored research experience supported by the UFS grant.

Funding and Awards by Purpose

A total of \$1,102,074 was secured through 29 awards for organized research. The remaining 42 awards provided \$28,284,577 in funding for other sponsored activities, including student services, training, instruction, and public service. The following graphs illustrate the funding amount and number of awards by purpose.



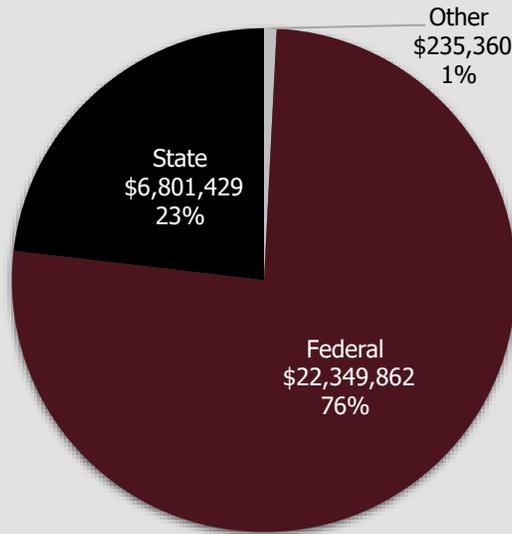
Number of Awards by Purpose



Funding by Source of Funds

Federal funds awarded totaled \$22,349,862, which represents 76% of the total amount awarded to EKU during the 2022 fiscal year. The Federal funding total includes funding awarded directly to the University from Federal agencies as well as Federal funding passed through the State of Kentucky, awarded through subawards from collaborating universities, and granted through other pass-through entities. State-funded awards represent 23% of the total funding for fiscal year 2022 at \$6,801,429. The remaining \$235,360 (1%) was awarded by local and private sponsoring agencies. The graph below illustrates the amount of funding awarded by source for FY 2022.

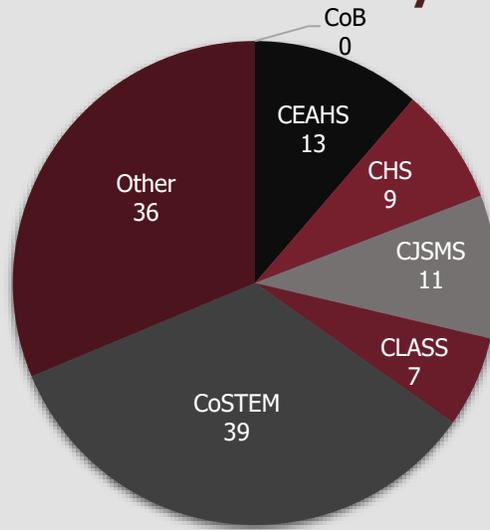
Funding by Source



Proposal Submissions

During the 2022 fiscal year, a total of 115 separate proposals were submitted by ECU faculty and staff. The following graph shows the number of proposals submitted by college. For projects that include a project director and co-project director(s) from different colleges, proposals are reported for the project director's college.

Proposal Submissions by College

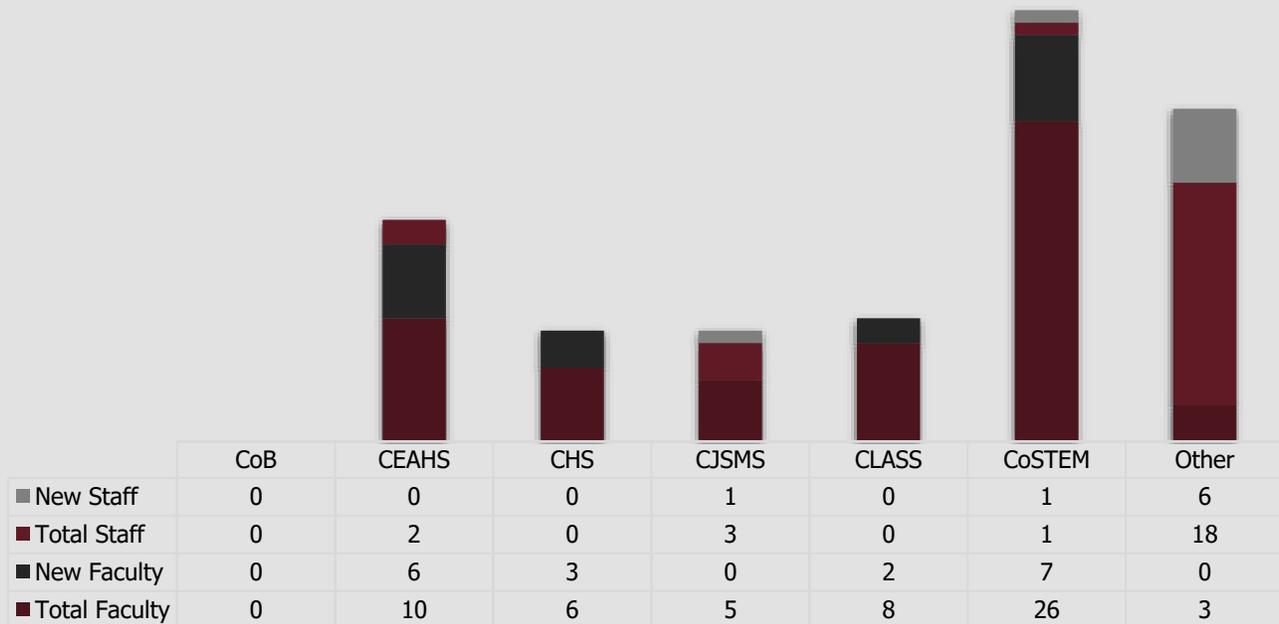


Dr. Judy Jenkins (Center for STEM Excellence) received grant funding from Proctor & Gamble for a “Make at ECU” project that involved equipping an Innovation Alcove in the Science Building atrium. At left, Dr. Jenkins shares a project with students in the alcove space.

Faculty and Staff Submitting Proposals

A total of 82 individuals (58 faculty and 24 staff) submitted proposals in FY 2022.⁴ Of these, 26 (18 faculty and 8 staff) were first-time proposal submitters. The chart below illustrates the number of individuals submitting proposals during FY 2022 by college.

Faculty and Staff Submitting Proposals

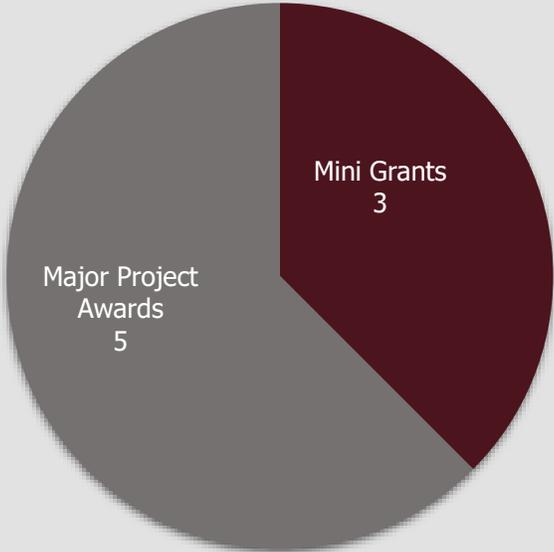


⁴ Counts include both project directors and co-project directors on proposals submitted.

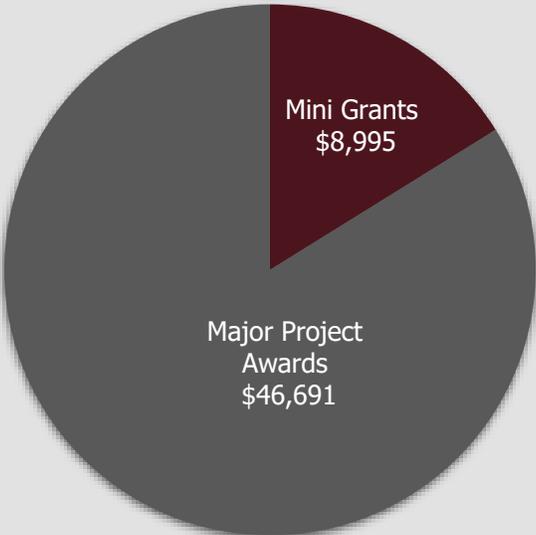
University-Funded Scholarship Grants

During the 2022 fiscal year, Sponsored Programs processed 27 applications for University-Funded Scholarship (UFS) grants. For the fall and spring competitions, there were 15 mini-grant applications and 12 major project award applications submitted. Following the competitive peer review process, funding was awarded for five (5) major project awards totaling \$46,691 and three (3) mini-grants totaling \$8,995. A total of \$55,686 was awarded to support faculty scholarship in FY 2022. The graphs below reflect the number of grants and amount of funding awarded by project type.

Number of UFS Awards by Type



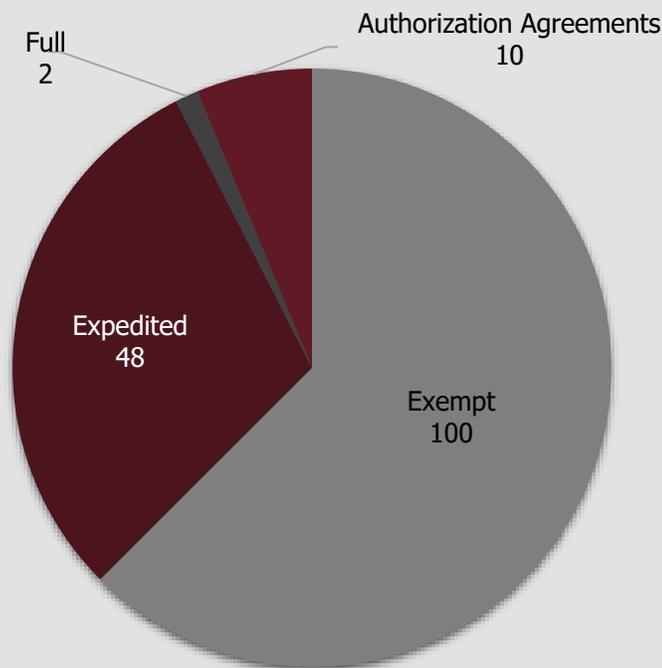
Amount of UFS Awards by Type



Human Subjects Research Compliance

The Institutional Review Board (IRB) for the protection of human research subjects is responsible for reviewing all research activities involving human subjects conducted by ECU faculty, staff, or students and is administered through Sponsored Programs. During the 2022 fiscal year, 160 research protocols were reviewed and approved by the IRB. Of these protocols, 100 were classified as exempt from further review under the federal Office of Human Research Protections (OHRP) regulations. Forty-eight (48) protocols were processed through the expedited review process, and two (2) protocols were approved after a full convened meeting of the IRB. Ten (10) studies were approved through authorization agreements with other university or hospital IRBs. The graph below illustrates the number of IRB-approved studies by review type.

Human Subjects Research Protocols



Animal Care and Use Compliance

The mission of the Institutional Animal Care and Use Committee (IACUC) is to promote and safeguard activities within the ECU academic community that involve the use vertebrate animals for research or instructional purposes. The IACUC review and compliance processes are administered through Sponsored Programs. Nine (9) protocols were processed and approved by the IACUC during the 2022 fiscal year.

Funding Awards Recognition



Externally-Funded Sponsored Project Awards

Akers, Jon (Center for School Safety). Kentucky Center for School Safety. Kentucky Department of Education. \$674,937.

Anderson, Sierrah (Retention and Graduation). ECU NOVA Student Support Services. U.S. Department of Education. \$401,815.

Barger, Crystal (Training Resource Center). Medicaid Waiver Management Application. Kentucky Cabinet for Health and Family Services. \$29,270.

Barger, Crystal (Training Resource Center). Serve Kentucky Training Services. Cabinet for Health and Family Services. \$101,136.

Bill, Maggie (Regional Stewardship). Perry Promise Neighborhood E-Mentors. Berea College. \$42,969.

Brown, David (Biological Sciences) and **Watson, Kelly** (Physics, Geosciences, and Astronomy). REPS Supplement to REU Site: Disturbance Ecology in Central Appalachia. National Science Foundation. \$9,576.

Brown, David (Biological Sciences). Bobwhite habitat restoration at Taylor Fork Ecological Area. Bobwhite License Plate Board. \$0 (direct purchases made by sponsoring agency).

Brown, David (Biological Sciences). Monitoring Landbirds in Dynamic Forest Restoration Blocks in the Cumberland Plateau. Ruffed Grouse Society & American Woodcock Society. \$29,000.

Brown, Gary (Environmental Health Science). Central Appalachian Regional Education Research Center: MPH-Industrial Hygiene Core. University of Kentucky. \$90,988.

Bundy, Myra (Psychology) and **O'Brien, Shirley** (Occupational Science and Occupational Therapy). Eastern Kentucky University Developmental Disabilities Clinic Autism Social Skills and Coping Therapy Groups. WHAS Crusade for Children. \$5,600.

Bundy, Myra (Psychology). Kentucky Leadership Education in Neurodevelopmental and other Related Disabilities. University of Kentucky. \$28,382.

Bush, Dana (Applied Human Sciences). ECU Student Child Care Access and Expansion Program. U.S. Department of Education. \$245,176.

Bush, Dana (Applied Human Sciences). Workforce Opportunity for Rural Communities: Early Childhood Education Career Pathways. Save the Children. \$122,326.

Calie, Patrick (Biological Sciences). Dimensions US-China: Collaborative Research: Impacts of heritable plant-fungus symbiosis on phylogenetic, genetic and functional diversity. University of Kentucky. \$28,303.

Caudill, Brenda (Student Health Services). COVID-19 Vaccine Challenge. American College Health Association. \$3,000.

Compton, Brad (Financial Affairs). COVID Mitigation Strategies. Kentucky Council on Postsecondary Education. \$226,500.

Cormier, Lindsay (Biological Sciences) and **Ndinguri, Margaret** (Chemistry). Novel Compounds for Diagnosing, Treating, and Monitoring Triple Negative Breast Cancer. University of Kentucky. \$49,836.

Cormier, Lindsay (Biological Sciences) and **Ndinguri, Margaret** (Chemistry). Novel Compounds for Diagnosing, Treating, and Monitoring Triple Negative Breast Cancer. University of Kentucky. \$32,910.

Cornelius, Susan (Workforce Development & Community Engagement). 21st Century Community Learning Centers. Kentucky Department of Education. \$234,150.

Davis, Heather (Student Success, Outreach, and Opportunity). 2022 CPE Summer Bridge Grant. Kentucky Council on Postsecondary Education. \$197,000.

Davis, Heather (Student Success, Outreach, and Opportunity). 2022 GEAR UP Kentucky Summer Academy. Kentucky Council on Postsecondary Education. \$82,405.

Davis, Heather (Student Success, Outreach, and Opportunity). GEAR UP Berea-Promise Zone-Colonels Now Summer 2022. Berea College. \$64,000.

Dodd, Luke (Biological Sciences). Surveys for occupancy of Allegheny Woodrat and Incidence of Raccoon Roundworm along the Kentucky-Virginia Border. Radford University. \$1,000.

Domenghini, Jacob (Agriculture). Hydroponic Blueberry Establishment. Kentucky Horticulture Council. \$5,000.

Dunlap, Scotty (Safety and Security). Central Appalachian Regional Education Research Center: Occupational Safety Core. University of Kentucky. \$130,216.

Fredericks, Jamie (Chemistry). IMPACT Competition Award: Sample Collection Tool for Rapid DNA Analysis. Kentucky Commercialization Ventures. \$9,000.

Fry, Jason (Physics, Geosciences & Astronomy). Data Management for the BL3 Experiment. Tulane University. \$47,184.

Fry, Jason (Physics, Geosciences & Astronomy). Development of FPGA Systems on Chip for Data Acquisition (KAMPERS Project). Kentucky NSF EPSCoR. \$24,405.

Grempe, Michelle (Teaching, Learning, and Educational Leadership). Scholarships for Special Education Teacher Certification. WHAS Crusade for Children. \$21,000.

Hay, Michael (Migrant Education). Southern KY Migrant Education Program Regional Center. Kentucky Department of Education. \$526,525.

Hess, Zachary (Retention and Graduation). Summer Food Service Program Application. Kentucky Department of Education. \$6,971.

Hess, Zachary (Retention and Graduation). Upward Bound Program. U.S. Department of Education. \$603,279.

Jarvis, Thomas (Physics, Geosciences & Astronomy). Optical Spectroscopy Support for KY Advanced Manufacturing Initiative. Kentucky NSF EPSCoR. \$31,498.

Jenkins, Judith (Center for STEM Excellence). D3TaLES: Outreach Activities. University of Kentucky. \$13,875.

Jenkins, Judith (Center for STEM Excellence). Data-enabled Discovery and Design to Transform Liquid-based Energy Storage. University of Kentucky. \$36,830.

Jenkins, Judith (Center for STEM Excellence). Kentucky Advanced Partnership for Enhanced Robotics and Structures (KAMPERS). Kentucky NSF EPSCoR. \$54,384.

Jenkins, Judith (Center for STEM Excellence). Make at EKU - Maker Challenges and the Innovation Alcove at the EKU Center for STEM Excellence. Proctor & Gamble. \$20,000.

Korson, Stacey (Teaching, Learning, and Educational Leadership), **McCardle, Jilliane** (Model Laboratory Schools), and **Zuccaro, Emily** (Teaching, Learning, and Educational Leadership). Kentucky Reading Project Cadre 24. University of Kentucky. \$51,103.

Lair, Jessica and **Pitt, Mark** (Physics, Geosciences & Astronomy). Live, Interactive Shows for the Hummel Planetarium. University of Kentucky. \$24,988.

Liang, Gongbo (Computer Science). Application of Machine Learning Techniques to the Analysis of EUV Images and Light Curves. University of Kentucky. \$10,133.

Mason, Nicola (Teaching, Learning, and Educational Leadership), **Carpenter, Russell** (Provost's Office), **Foster, Chad** (School of Safety, Security, and Emergency Management), and **Wentzel, Starr** (First-Year Courses and Learning Communities). Kentucky Graduate Profile Academy. Kentucky Council on Postsecondary Education. \$12,500.

McClellan, Michael and **Wygant, Dustin** (Psychology). Predictive Validity of the MMPI-3 with Transgender College Students. University of Minnesota Press. \$25,000.

McKaskle, Lindsey (Athletics). NCAA Accelerating Academic Success Program Initiative Grant (Single Year. NCAA. \$100,000.

Moreland, Robyn (Retention and Graduation). Center for Student Parents: Post Secondary Program. Cabinet for Health and Family Services. \$461,984.

Nolan, Ronnie (KECSAC). Kentucky Educational Collaborative for State Agency Children (KECSAC). Kentucky Department of Juvenile Justice. \$668,104.

Park, Jiyeon and **Manning, Maria** (Teaching, Learning, and Educational Leadership). Integrating Assistive Technology across Teacher Preparation Program. University of Kentucky. \$7,000.

Parker, Jill (Training Resource Center). University Training Consortium. Kentucky Cabinet for Health and Family Services. \$20,647,570.

Perkins, Aileen (Adult Education). Adult Education Program - Madison and Clay Counties. Kentucky Education and Workforce Development Cabinet. \$615,474.

Peters, Valerie (Biological Sciences). CAREER: Advancing scientific knowledge of tropical mutualistic network science and public knowledge of tropical bee importance. National Science Foundation. \$479,443.

Peters, Valerie (Biological Sciences). The impact of global change on pollinators and pollination services. Earthwatch. \$17,420.

Peters, Valerie (Biological Sciences). The impact of global change on pollinators and pollination services. Earthwatch. \$34,340.

Reed, Tanea (Chemistry). KY-INBRE Lead Faculty Award. University of Louisville. \$19,742.

Richmond, Richard (Retention and Graduation). Ronald E. McNair Postbaccalaureate Achievement Program (McNair Scholars Program). U.S. Department of Education. \$261,888.

Richter, Stephen and **Watson, Kelly** (Center for Outdoor Education and Research). Partnership to support natural, recreational, environmental, and cultural resource education in the Red River Gorge, Kentucky. FIND Outdoors. \$6,000.

Richter, Stephen and **Watson, Kelly** (Natural Areas). Partnership to support natural, recreational, and cultural resource management and education on the Daniel Boone National Forest. USDA Forest Service. \$50,000.

Richter, Stephen and **Watson, Kelly** (Natural Areas). Wetland and forest monitoring in the Daniel Boone National Forest. USDA Forest Service. \$14,034.

Rowe, Laura (Chemistry). Improving the biostability and target selectivity of antimicrobial peptides and carbon monoxide releasing molecules with unnatural amino acids. University of Louisville. \$56,800.

Rowe, Laura (Chemistry). KY-INBRE Start-Up Grant. University of Louisville. \$11,260.

Rutland, Julie (Teaching, Learning, and Educational Leadership). Using Adaptations in Early Childhood Classrooms. University of Kentucky. \$3,021.

Saulnier, Stephanie and **Stevenson, Erin** (Social Work). Southeastern Kentucky Restorative Justice Project. Volunteers of America. \$41,283.

Savage, Mike (WEKU). Kentucky Storm Coverage Grant. Corporation for Public Broadcasting. \$30,000.

Savage, Mike (WEKU). Ohio Valley ReSource. Louisville Public Media. \$12,250.

Savage, Mike (WEKU). WEKU FY 2022 Radio Community Service Grant. Corporation for Public Broadcasting. \$184,020.

Scarambone, Bernardo (Music). Cultural Exchange: A Cross-Musical Immersion Between the Federal University of Amazonas and Eastern Kentucky University. U.S. Embassy Brasilia Public Affairs. \$26,327.

Schilling, Amy and **Moore, Katie** (American Sign Language and Interpreter Education). Interpreter Training Program. Kentucky Department of Education. \$401,892.

Sons, Lisa (Retention and Graduation). Educational Talent Search Program. U.S. Department of Education. \$424,384.

Struck, Julie (College of Justice, Safety, and Military Science Dean's Office). Kentucky Students for Disaster Readiness and Resiliency Corps (KY READY Corps). Kentucky Cabinet for Health and Family Services. \$300,811.

Struck, Julie (College of Justice, Safety, and Military Science Dean's Office). Kentucky Students for Disaster Readiness and Resiliency Corps (KY READY Corps) - American Rescue Plan Act Funding. Kentucky Cabinet for Health and Family Services. \$40,173.

Wang, Ni (Applied Engineering and Technology). Platform Creation on Robotic End Effector Design and Simulation. Kentucky NSF EPSCoR. \$62,852.

Watson, Kelly and **Richter, Stephen** (Natural Areas). Recreation Heritage Engineering Lands Program Student Internships. USDA Forest Service. \$12,026.

Zuccaro, Emily (Teaching, Learning, and Educational Leadership). Adolescent Literacy Project. University of Kentucky. \$42,384.

University-Funded Scholarship Grant Awards

Major Project Awards:

Dodd, Luke (Biological Sciences). Occupancy of Allegheny Woodrat and Incidence of Raccoon Roundworm along the Pine Mountain Wildlands Corridor. \$9,635.

Jarvis, Thomas (Physics, Geosciences, and Astronomy). Laser Surface Processing of Wood for Food Industry Applications. \$9,646.

Makecha, Radhika and **Nakai, Yoshie** (Psychology). Conservation Education Using Elephant Cognition. \$7,450.

Park, Jiyeon and **Gremp, Michelle** (Learning, Teaching, and Educational Leadership). Integrating Assistive and Instructional Technology into Higher Education. \$10,000.

Peters, Valerie (Biological Sciences). Testing priority plant species in tropical pollinator community assembly. \$9,960.

Mini-Grant Awards:

Endonino, Jon (Languages & Cultures, Anthropology, and Sociology). ECU Archaeology Field School Blood Protein Residue Analysis and Radiocarbon Dating. \$3,000.

Mott, Cy (Biological Sciences). Characterizing optimal within-species body size variation in an aquatic predator. \$2,996.

Stevenson, Erin (Social Work). Resilience, Social Support, and Academic Achievement Among First-generation College Students. \$2,999.