Sponsored research awards ANNUAL REPORT FY 2021



Office of the Vice President for Research



September 29, 2021

Dear colleague:

The Office of the Vice President for Research is pleased to provide the attached proposal/award activity report for the period July 1, 2020-June 30, 2021. We are presenting this annual report in a new format, making it easier for the user to search, compare, and collect information across the university. The complete, more detailed interactive report is available at k-state.edu/research/faculty/awards/reports/.

Total extramural funding garnered by Kansas State University has increased for the sixth year in a row, for a net increase of more than 60% since fiscal year 2016. In FY 2021, our researchers received 1182 awards for a record total of \$206,997,683 in extramural support, representing increases of 4% in both awards and funding over the previous year.

Economic Development and Technology Transfer are significant focus areas, as is growth in the number of our strategic partnerships. Kansas State University Innovation Partners, our technology commercialization, economic development and corporate engagement unit facilitated more than \$3.7 million in total licensing revenue in FY 2021 and 22 license agreements: three of those agreements with direct impact on the fight against COVID-19. At this writing, additional COVID-19 treatments continue to be developed, disclosed, licensed, and further tested and validated with corporate partners. Over the last decade, 24 companies and 700 employees have been attracted to the region.

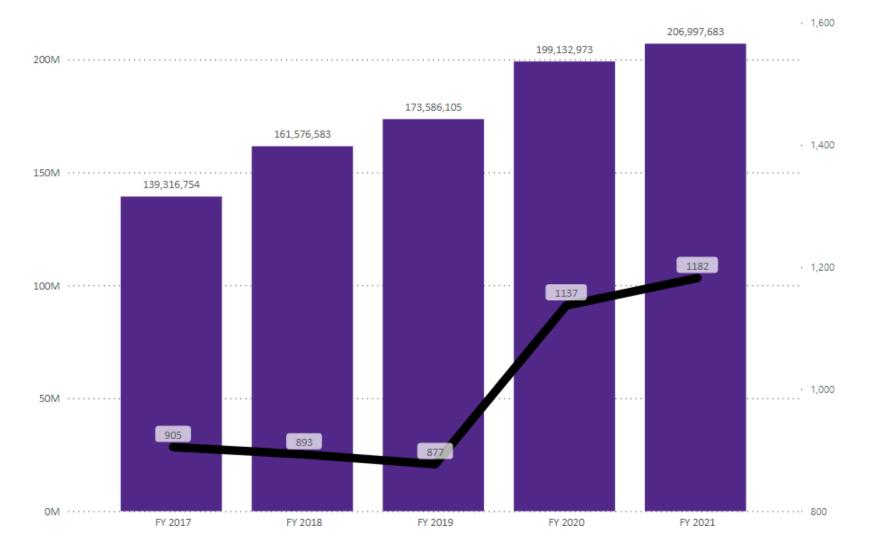
This was an **all-around record year** for research at Kansas State University, despite the pandemic persisting into FY 2021. Our researchers are resilient and are committed to making K-State a leader in research and a major contributor to discovery and innovation that benefits our state, the nation and the world.

If you have questions about the content of this report, please contact Paul Lowe at plowe@k-state.edu or 785-532-6804, or RADAR team at radar@k-state.edu or 785-532-6804.

Sincerely,

David V. Rosowsky, Ph.D. Vice President for Research

Award amount and count FY 2017-FY 2021



Expenditures (NSF HERD) FY 2016 - FY 2020

National Science Foundation HERD survey

The National Science Foundation conducts the annual Higher Education Research and Development (HERD) survey, which includes over 600 higher education institutions. This survey is a primary source of information regarding research expenditures and provides tremendous insight into K-State's research activity and is a key metric for K-State research activity.



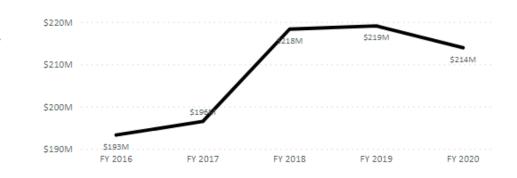
| Fiscal Year | | | | | \sim |
|-------------|---------|---------|---------|---------|--------|
| FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | |

-Filters-----

Source of Funds

Field of Study

| Engineering | Non-S&E | Science |
|-------------|---------|---------|
|-------------|---------|---------|

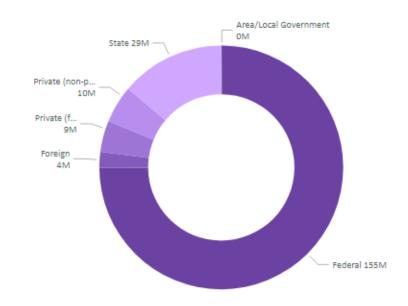


\$213.9M

Expenditure

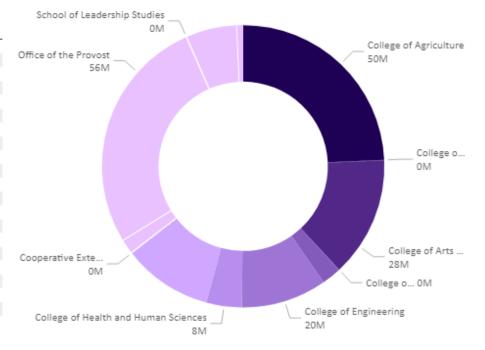
Award summary by source FY 2021

| Source of Funds | Count | Amount | Percent of Total |
|--|-------|-------------|------------------|
| - Federal | 606 | 154,843,089 | 74.80% |
| US Education - US Department of Education | 18 | 58,463,361 | 28.24% |
| USDA - US Department of Agriculture | 252 | 34,476,974 | 16.66% |
| HHS - US Department of Health and Human Services | 92 | 15,948,502 | 7.70% |
| NSF - National Science Foundation | 83 | 12,121,405 | 5.86% |
| DOE - US Department of Energy | 38 | 9,668,515 | 4.67% |
| USAID - United States Agency for International Development | 19 | 7,495,441 | 3.62% |
| DOD - US Department of Defense | 32 | 3,934,546 | 1.90% |
| DOT - US Department of Transportation | 13 | 2,360,332 | 1.14% |
| US Commerce - US Department of Commerce | 6 | 1,962,951 | 0.95% |
| DOI - US Department of the Interior | 19 | 1,710,030 | 0.83% |
| US Commerce | 1 | 1,700,000 | 0.82% |
| US Treasury | 3 | 1,623,519 | 0.78% |
| DHS - US Department of Homeland Security | 3 | 1,054,036 | 0.51% |
| Other Federal | 6 | 896,132 | 0.43% |
| EPA - US Environmental Protection Agency | 9 | 728,620 | 0.35% |
| NASA - National Aeronautics and Space Administration | 9 | 576,927 | 0.28% |
| HUD - US Department of Housing and Urban Development | 1 | 78,803 | 0.04% |
| US State - US Department of State | 2 | 42,995 | 0.02% |
| State | 164 | 28,643,952 | 13.84% |
| Private (non-profit) | 212 | 10,317,856 | 4.98% |
| Private (for profit) | 159 | 8,549,317 | 4.13% |
| 🕂 Foreign | 29 | 4,380,428 | 2.12% |
| Area/Local Government | 12 | 263,041 | 0.13% |
| Total | 1182 | 206,997,683 | 100.00% |



Award summary by unit FY 2021

| Unit | Count | Amount | Percent of Total |
|---|------------|--------------------------|------------------|
| College of Agriculture | 548 | 50,236,347 | 24.27% |
| College of Architecture, Planning and Design | 7 | 109,665 | 0.05% |
| College of Arts and Sciences | 203 | 28,492,139 | 13.76% |
| College of Business Administration | 4 | 77,364 | 0.04% |
| College of Education | 38 | 4,614,666 | 2.23% |
| College of Engineering | 183 | 20,244,664 | 9.78% |
| College of Health and Human Sciences | 54 | 8,424,268 | 4.07% |
| College of Veterinary Medicine | 179 | 21,215,597 | 10.25% |
| Cooperative Extension Service | 9 | 33,169 | 0.02% |
| Division of Communications and Marketing | 2 | 32,000 | 0.02% |
| Graduate School | 7 | 18,036 | 0.01% |
| Information Systems | 3 | 19,228 | 0.01% |
| K-State Libraries | 3 | 28,971 | 0.01% |
| K-State Olathe | 1 | 50,000 | 0.02% |
| K-State Polytechnic | 33 | 3,427,532 | 1.66% |
| Office of the President | 2 | 61,000 | 0.03% |
| Office of the Provost | 16 | 56,191,139 | 27.15% |
| School of Leadership Studies | 2 | 179,236 | 0.09% |
| University Operations | 1 | 0 | 0.00% |
| Vice President for Research | 24 | 11,995,602 | 5.80% |
| Vice President for Student Life and Dean of Students Total | 10 1182 | 1,547,062 206,997,683 | 0.75% 100.00% |



Award summary by unit FY 2017-FY 2021

| Date Fiscal Year | FY 201 | 7 | FY 2018 | 3 | FY 2019 |) | FY 2020 | 0 | FY 2021 | L |
|--|--------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|
| Unit | Count | Amount | Count | Amount | Count | Amount | Count | Amount | Count | Amount |
| + College of Agriculture | 397 | 45,809,019 | 369 | 39,795,801 | 355 | 49,522,566 | 478 | 60,397,265 | 548 | 50,236,347 |
| College of Architecture, Planning and Design | 8 | 197,543 | 5 | 35,995 | 8 | 104,275 | 13 | 133,351 | 7 | 109,665 |
| College of Arts and Sciences | 163 | 27,243,509 | 152 | 51,278,662 | 152 | 48,042,873 | 216 | 50,535,891 | 203 | 28,492,139 |
| + College of Business Administration | 1 | 47,500 | | | 2 | 94,469 | 4 | 40,254 | 4 | 77,364 |
| College of Education | 28 | 3,461,870 | 32 | 2,500,753 | 24 | 3,858,387 | 41 | 5,672,027 | 38 | 4,614,666 |
| College of Engineering | 139 | 17,705,722 | 156 | 22,696,113 | 140 | 22,382,058 | 210 | 33,431,636 | 183 | 20,244,664 |
| College of Health and Human Sciences | | | | | | | 34 | 6,928,170 | 54 | 8,424,268 |
| College of Human Ecology | 42 | 10,520,492 | 48 | 10,685,358 | 43 | 12,557,244 | | | | |
| College of Veterinary Medicine | 119 | 11,566,509 | 141 | 16,101,496 | 151 | 14,522,368 | 150 | 17,678,877 | 179 | 21,215,597 |
| Cooperative Extension Service | 54 | 11,510,133 | 48 | 5,519,142 | 35 | 8,666,611 | 43 | 3,968,950 | 9 | 33,169 |
| Division of Communications and Marketing | | | | | | | 2 | 44,250 | 2 | 32,000 |
| + Facilities Management | | | 1 | 3,750 | | | | | | |
| + Graduate School | | | | | | | 5 | 426,122 | 7 | 18,036 |
| Information Systems | | | | | | | 2 | 7,237 | 3 | 19,228 |
| + K-State Global | | | | | | | 1 | 5,000 | | |
| + K-State Libraries | | | | | | | 1 | 5,000 | 3 | 28,971 |
| + K-State Olathe | 3 | 43,700 | | | 1 | 0 | 1 | 0 | 1 | 50,000 |
| + K-State Polytechnic | 3 | 174,821 | 6 | 650,512 | 17 | 1,210,500 | 24 | 2,200,892 | 33 | 3,427,532 |
| + Office of the President | 3 | 5,022,932 | 3 | 5,026,300 | 3 | 5,082,500 | 1 | 1,760 | 2 | 61,000 |
| Office of the Provost | 20 | 1,831,565 | 15 | 2,153,790 | 17 | 1,804,874 | 19 | 14,222,026 | 16 | 56,191,139 |
| + School of Leadership Studies | | | | | | | 5 | 343,933 | 2 | 179,236 |
| + University Operations | | | | | | | 3 | 13,102 | 1 | 0 |
| + Vice President for Administration and Finance | 2 | 9,878 | 1 | 2,000 | 1 | 24,897 | | | | |
| + Vice President for Research | 10 | 2,067,758 | 10 | 1,839,343 | 12 | 2,709,839 | 23 | 1,360,005 | 24 | 11,995,602 |
| + Vice President for Student Life and Dean of Students | 20 | 2,103,803 | 24 | 3,287,568 | 25 | 3,002,644 | 15 | 1,717,225 | 10 | 1,547,062 |
| Total | 905 | 139,316,754 | 893 | 161,576,583 | 877 | 173,586,105 | 1137 | 199,132,973 | 1182 | 206,997,683 |

Proposal summary by unit FY 2017-FY 2021

| Fiscal Year | FY 2017 | 7 | FY 201 | В | FY 2019 | Э | FY 202 | D | FY 2021 | 1 |
|--|---------|-------------|--------|-------------|---------|-------------|--------|-------------|---------|-------------|
| Unit | Count | Amount | Count | Amount | Count | Amount | Count | Amount | Count | Amount |
| + College of Agriculture | 662 | 99,817,778 | 584 | 105,313,313 | 680 | 121,218,028 | 596 | 143,844,412 | 700 | 134,523,547 |
| College of Architecture, Planning and Design | 17 | 2,381,620 | 11 | 1,893,716 | 14 | 712,119 | 15 | 841,476 | 17 | 453,454 |
| College of Arts and Sciences | 418 | 135,552,920 | 393 | 159,900,360 | 415 | 148,784,203 | 360 | 164,304,565 | 326 | 96,022,283 |
| College of Business Administration | 3 | 467,822 | 2 | 20,281 | 4 | 247,685 | 2 | 33,073 | 5 | 944,040 |
| College of Education | 86 | 42,280,306 | 84 | 25,851,795 | 66 | 29,736,528 | 58 | 17,381,344 | 95 | 33,126,476 |
| College of Engineering | 367 | 112,386,322 | 382 | 116,344,236 | 378 | 112,581,319 | 334 | 146,487,835 | 382 | 150,426,652 |
| College of Health and Human Sciences | | | | | | | 73 | 20,340,762 | 97 | 32,474,392 |
| College of Human Ecology | 96 | 27,817,693 | 87 | 16,864,265 | 89 | 24,278,713 | | | | |
| College of Veterinary Medicine | 289 | 89,982,884 | 290 | 87,789,238 | 337 | 96,062,260 | 252 | 89,683,292 | 247 | 60,563,663 |
| Cooperative Extension Service | 86 | 9,196,091 | 76 | 8,104,558 | 71 | 11,916,576 | 49 | 6,382,061 | 2 | 0 |
| Division of Communications and Marketing | | | | | | | 1 | 20,000 | 3 | 32,000 |
| Facilities Management | | | 1 | 3,750 | 3 | 16,836 | | | | |
| Graduate School | | | | | | | 1 | 22,695 | 3 | 36,381 |
| + Information Systems | | | 1 | 375,000 | | | 2 | 182,330 | 1 | 6,000 |
| + K-State Global | | | | | | | 2 | 15,000 | | |
| K-State Libraries | | | | | | | з | 127,865 | 7 | 72,250 |
| + K-State Olathe | | | 1 | 24,600 | 4 | 651,637 | 4 | 814,273 | 6 | 1,013,865 |
| + K-State Polytechnic | 9 | 1,942,816 | 21 | 6,395,671 | 34 | 1,194,091 | 23 | 2,975,226 | 38 | 8,491,373 |
| Office of the President | 4 | 5,119,814 | 6 | 5,254,692 | 5 | 5,183,518 | 4 | 390,165 | 9 | 1,068,851 |
| Office of the Provost | 26 | 1,607,701 | 22 | 3,362,694 | 28 | 3,647,884 | 19 | 20,991,795 | 16 | 1,900,388 |
| School of Leadership Studies | | | | | | | 8 | 1,271,984 | 4 | 312,532 |
| University Operations | | | | | | | 1 | 3,000 | | |
| + Vice President for Administration and Finance | 2 | 0 | 1 | 0 | 1 | 24,897 | 1 | 0 | | |
| + Vice President for Research | 26 | 5,796,246 | 17 | 2,796,299 | 36 | 5,089,696 | 24 | 2,450,950 | 23 | 12,252,541 |
| \pm Vice President for Student Life and Dean of Students | 26 | 5,204,509 | 25 | 1,750,332 | 28 | 3,171,611 | 10 | 1,337,695 | 17 | 1,728,039 |
| Total | 1785 | 539,554,521 | 1712 | 542,044,800 | 1867 | 564,517,601 | 1553 | 619,901,798 | 1702 | 535,448,725 |

Award activity analysis FY 2021

