

WKU[®]
SPONSORED
PROGRAMS

ANNUAL REPORT 2008





External Awards and Proposals

During Fiscal year 2008, nearly 300 of WKU's faculty and staff wrote grant external proposals and received awards. This number is nearly one-third of the faculty and staff at WKU. WKU received \$22,123,638 in external awards. This amount was a decrease of \$2,147,984 from the previous year. WKU submitted proposals for \$52,580,115, which was an increase of \$3,972,624 over the previous year.

Indirect costs collected amounted to \$1,627,195, which was a decrease of \$184,106 from the previous year.

External awards for research were \$10,129,579, an increase of \$919,208 over the previous year.

Expenditures for external sponsored programs were \$25,767,645. This amount was a decrease of \$2,111,002 from the previous year. Specifically, expenditures for research projects amount to \$8,208,112. This amount was a decrease of \$2,193,888 from the previous year.

There were 455 grant-funded positions. This number was a decrease of 14 from the previous year.

Federal appropriations awards equaled \$2,668,264. This amount represented a decrease of \$633,418 from similar awards during the previous year.

Internal Awards and Proposals

All of the colleges participated in the Faculty Scholarship Council's internal awards program. Total awards equaled \$292,796 for 102 applications and 68 awards, which represented an increase of four applications and two awards over the previous year. Final reports received demonstrated that there were 114 outcomes to projects in the form of publications, presentations, posters, equipment purchases, and collaborations at WKU and at other institutions. Many collaborations included students.

The Western Kentucky University Research Foundation, Inc. (WKURF)

The WKURF's assets increased to \$9,080,770. This amount represents an increase of \$1,304,929 over the previous year.



Senior engineering major Zachary Pearl stands at the base of the 24 foot tall turbine located in Western's Center for Research and Development. Pearl is one of five students who collaborated on a design for a human powered water purification system.

Provost's Annual Proposals and Awards Annual Reception

WKU, at the Proposals and Awards Reception in November, presented certificates to 33 proposers and awardees for external projects. Certificates were presented to first-time PIs who received external awards. They were, Karla Andrew of the Water Resource Center; Eileen Arnold of Social Work; Chin-Min Cheng of the Center for Research and Development; Wil Clouse of the Department of Management; Ahmed Emam of Computer Science; David Keeling of Geography and Geology; Betsy Kitchens of Special Instructional Programs; Bruce Larson of Physical Education and Recreation; Alonda Massey of Parking and Transportation; Jennifer Montgomery of Special Instructional Programs; Carrie Pritchard of Psychology; Jonathan Quiton of Mathematics; Buddy Steen of the Small Business Accelerator; Travis Wilson of Consumer and Family Sciences; and Bangbo Yan and Rui Zhang of Chemistry.

Andrew Ernest of the Water Resource Center, and Wei-Ping Pan of the Institute for Combustion Science and Environmental Technology were the most prolific proposers.

The most prolific junior proposer was Hasan Palandoken of Chemistry.

The largest award winner was Blaine Ferrell, Dean, Ogden College of Science & Engineering.

The Ten Million Dollar Club was initiated for faculty and staff members who have received at least ten million dollars in awards in the last five years. Colleen Mendel, Executive Director of the Training and Technical Assistance Center was the first to enter this club.

New entrants into the Million Dollar Club were David Coffey of the Education Enhancement Programs; Karen Hackney of the Kentucky Space Grant Consortium and NASA EPSCoR; Jack Hanes of Educational Telecommunications; Rick Horn of the Small Business Development Center; and Martha Sales of Talent Search.

The Administrative Support Staff Award went to Rita Isenberg of Educational Telecommunications

The Department Head Award for the most award dollars brought in by a department head went to Keith Andrew of Physics and Astronomy.

The Largest Cumulative Grant Award by College went to Blaine Ferrell, Dean of Ogden College of Science and Engineering.

Dean William Tallon of the Gordon Ford College of Business received the award for the highest percentage increase of any college for external awards in the fiscal year.

Wei-Ping Pan of the Institute for Combustion Science and Environmental Technology won the award for the highest percent increase in industrially sponsored contract dollars by a department, center or institute.

First-time grant awards for a Co-PI went to Greg Arbuckle of AMS; Barry Brunson of Mathematics; Scott Dobler of Geography & Geology; and Susan Miller of Special Instructional Programs.

Goals

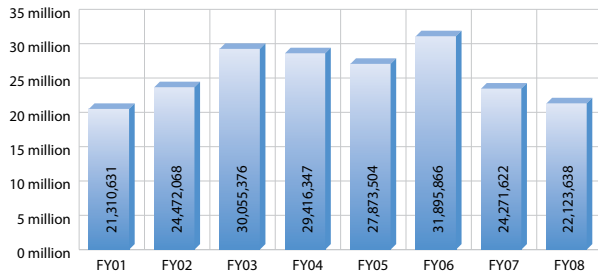
Scientific, engineering, education, liberal arts, health and human services, and education and behavioral science research, instruction and public service projects involve faculty, staff and students in strengthening and extending WKU's curriculum and community activities while improving the public good.

Researchers continued to study the impact of new technologies on the environment and how to disseminate their findings. To achieve their goals they often entered into research and economic development partnerships with industries, universities and communities.

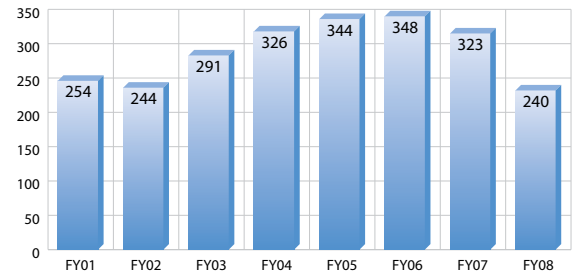
Institutional Level

Awards by Fiscal Year

Awards by Fiscal Year in Millions of Dollars

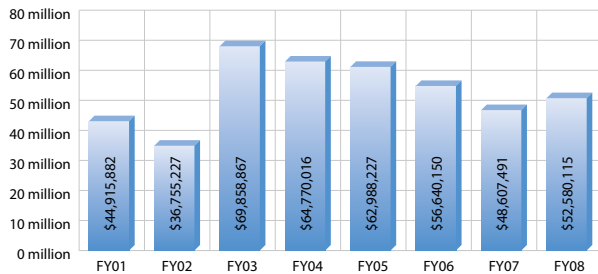


Number of Awards by Fiscal Year

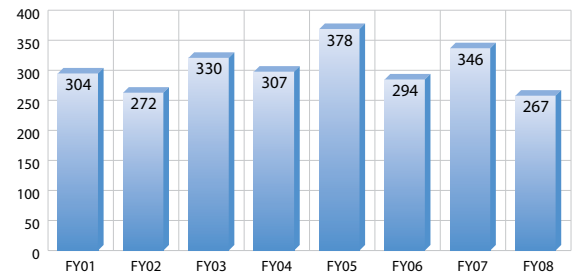


Proposals by Fiscal Year

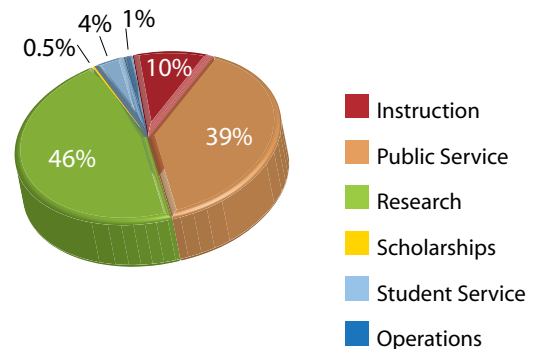
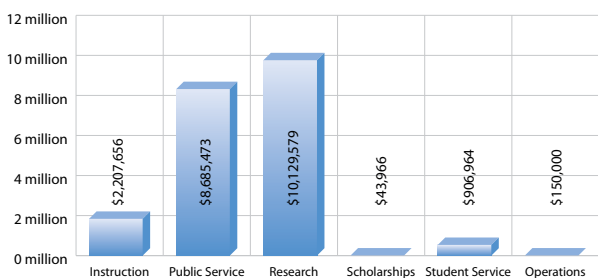
Proposals by Fiscal Year in Millions of Dollars



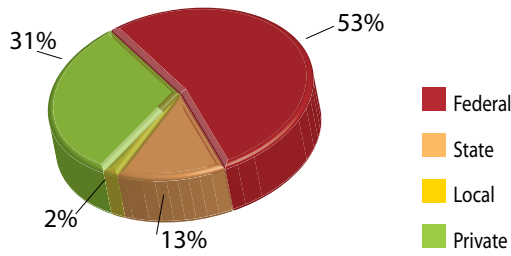
Number of Proposals by Fiscal Year



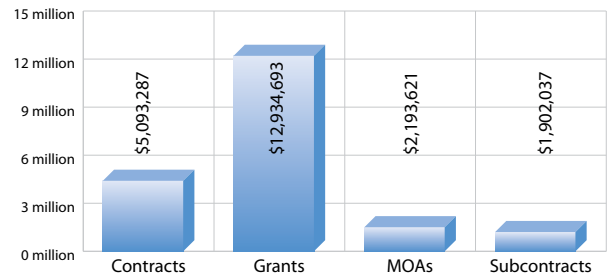
Awards by Project Type



Awards by Sponsor Type

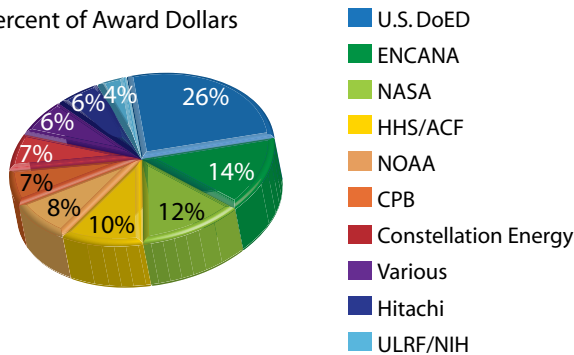


Awards by Award Type



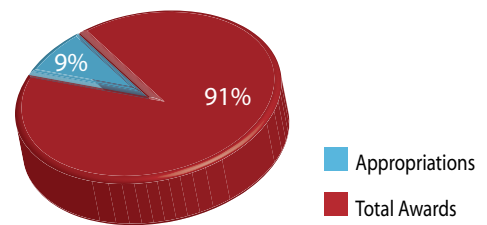
Top Ten Sponsors

by percent of Award Dollars

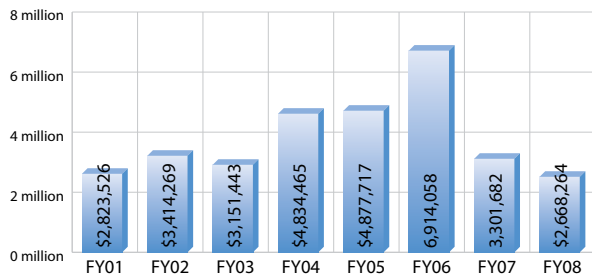


Federal Appropriation Awards

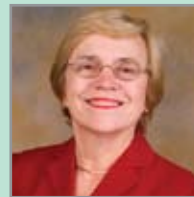
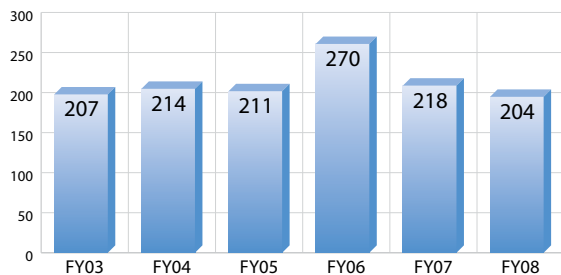
as part of Total Award Dollars



Subgrants Issued from Prime Awards



Charts of Accounts Created

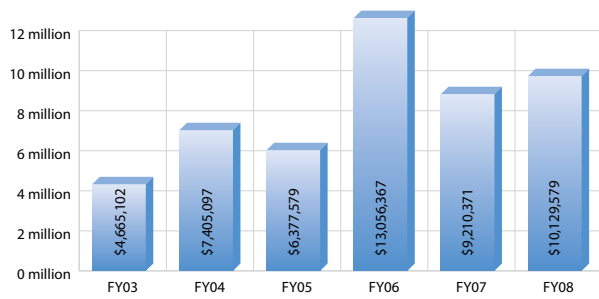


Dr. Julia Roberts
Center for Gifted Studies, College of Education and Behavioral Science

Project GEMS

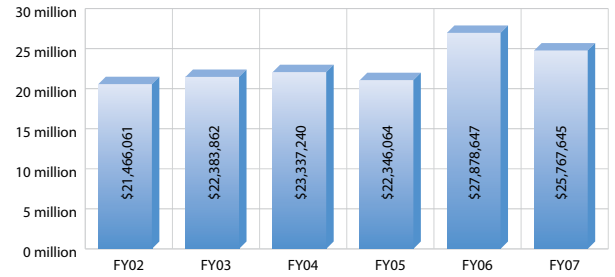
The Center for Gifted Studies at Western Kentucky University has received a five-year Javits grant funded by the U.S. Department of Education. Dr. Julia Roberts, Executive Director of The Center for Gifted Studies, is the principal investigator of this two million dollar grant. The Center for Gifted Studies will partner with the Warren County Schools on Project GEMS (Gifted Education in Math and Science). The goal of Project GEMS is to design and implement a model demonstration project that will increase the number of elementary children who are advanced in science and math and to foster their interest and achievement in science, technology, engineering, and mathematics. This project specifically targets children from low-income backgrounds and minorities who are underrepresented in STEM careers.

Dollar Amount of Research Awards

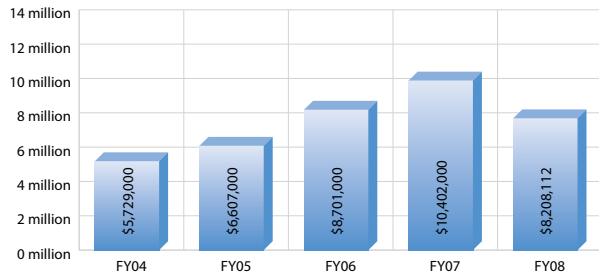


Total Grants and Contracts Expenditures

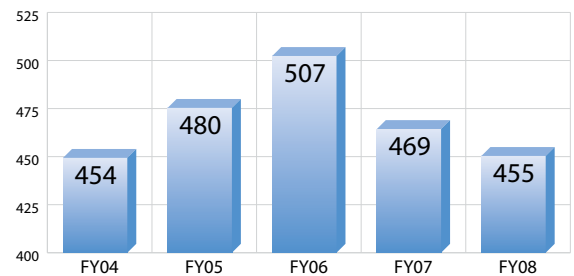
Fiscal Years 2002-2007



Research Expenditures



Grant-Funded Positions



Dr. Wil Clouse
*Professor of Management,
 Mattie Newman Ford Professor of
 Entrepreneurship*

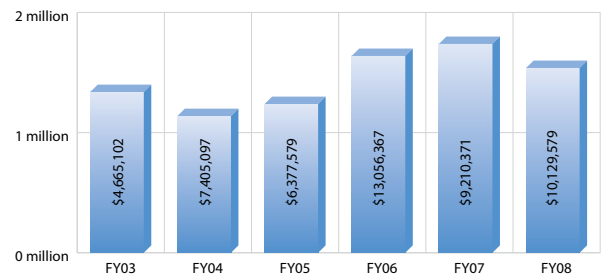
*Executive Director, Center for
 Entrepreneurship and Innovation,
 Gordon Ford College of Business*

Stimulating Entrepreneurship in the Lincoln Trail Counties

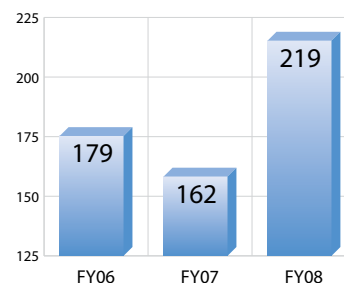
Dr. R. Wilburn Clouse concentrates on developing organizations for the future, including new business startups. His work investigates opportunities not normally seen by others and emphasizes the spirit of creativity and entrepreneurship. He investigates the intersection of new technology and the development of new enterprises. Dr. Clouse's work in humor, creativity, and entrepreneurship is designed to change both the learning and work environment and the culture of 21st century organizations. He is working with entrepreneurs in seven counties of central Kentucky to educate them about starting up business in conjunction with community goals. Entrepreneurs, county leaders, and WKU students collaborate to improve the infrastructure for growth.

Indirect Cost Collections

Fiscal Years 2003-2008

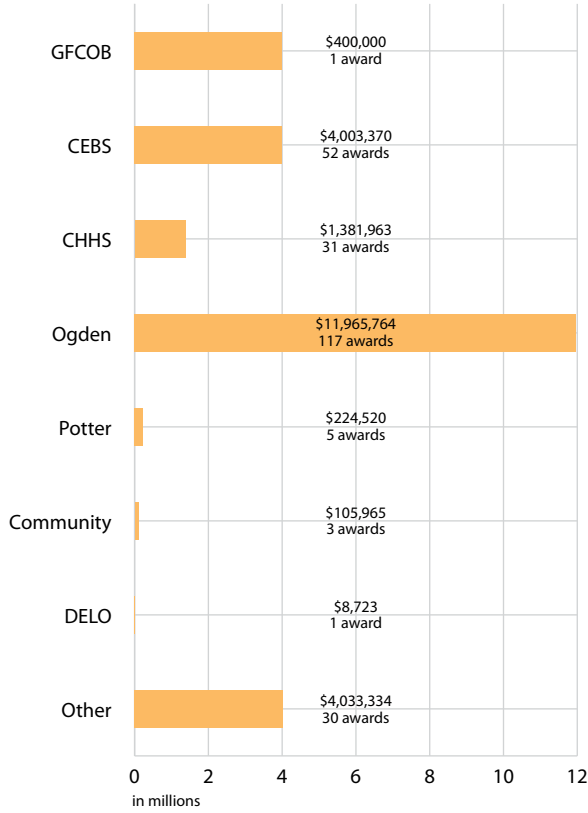


Awards Closed Out

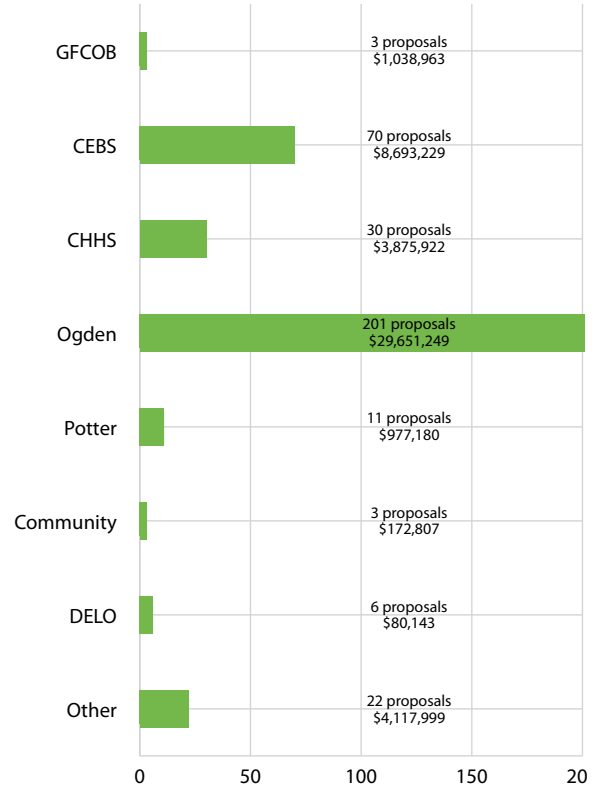


College Level

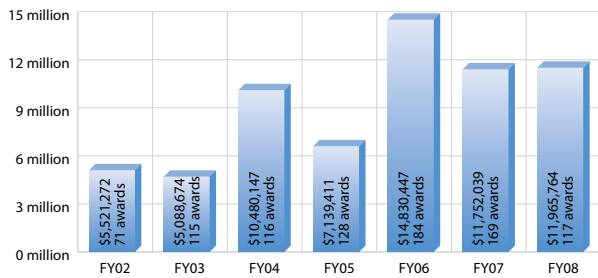
Award Dollars by Colleges or Major Units



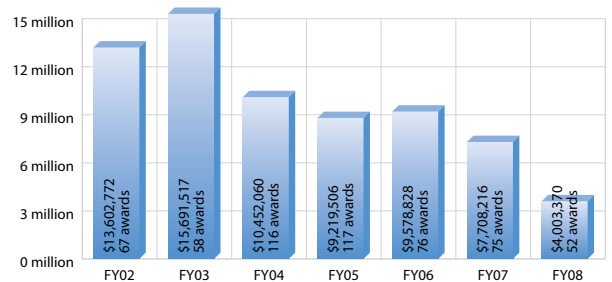
Proposals by College and Other Units



Seven-Year Awards (Ogden)



Seven-Year Awards (CEBS)





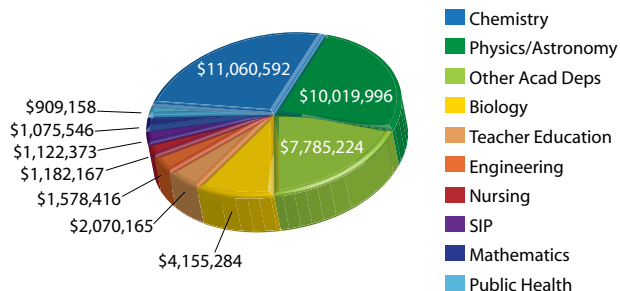
Dr. Heather Johnson
 Department of Biology, Ogden College
 of Science and Engineering

Kentucky Math Science Partnership

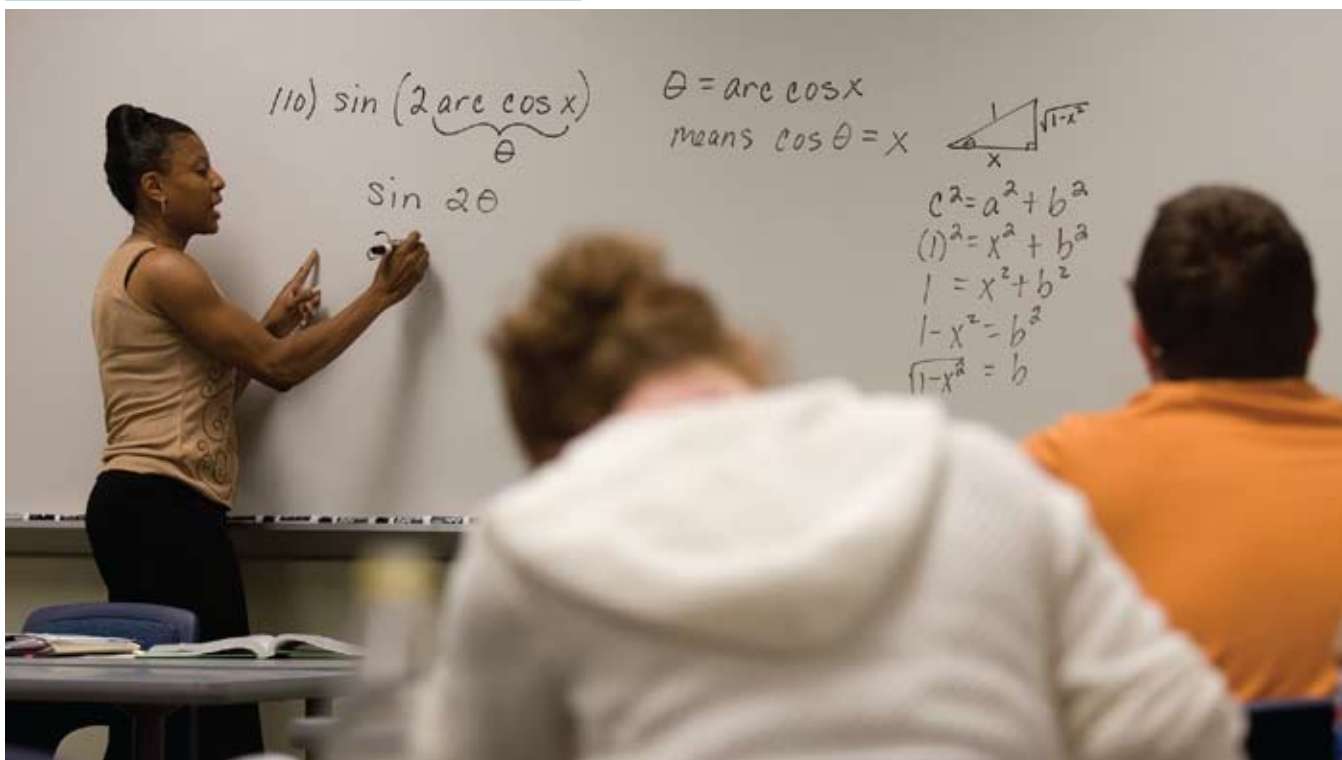
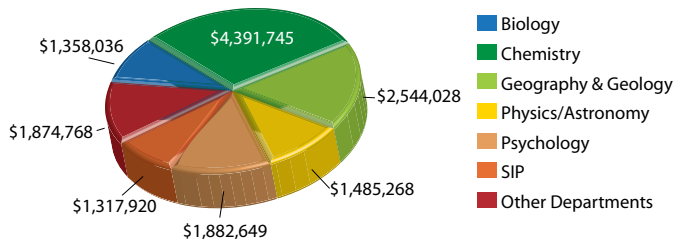
Dr. Heather Johnson was awarded a grant from the National Science Foundation for a collaboration among Western Kentucky University, its three regional campus centers (Glasgow, Elizabethtown/Fort Knox, and Owensboro Regional Centers), two community colleges (Bowling Green Community College and Hopkinsville Community College), 32 school districts in Western Kentucky (including schools in the Green River Regional Educational Cooperative - particularly Hart County Schools as a Core Partner) and Christian County Schools. Dr. Johnson will develop and establish an expanded partnership addressing a documented local, state, and national challenge to improve science and mathematics education. The focused challenge that will be the purpose of and vehicle for developing the partnership is improving teaching and learning in middle school to insure access of all students to rigorous high school math and science. The measure of attainment will be Kentucky's Education Planning System (EPAS) that administers the EXPLORE test in 8th grade, PLAN in 10th and ACT in 11th and 12th.

Academic Department

Proposal Dollars



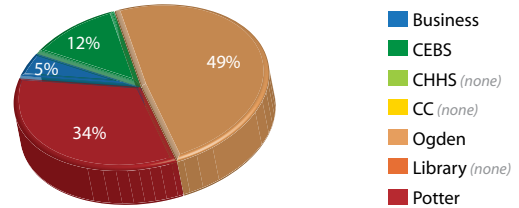
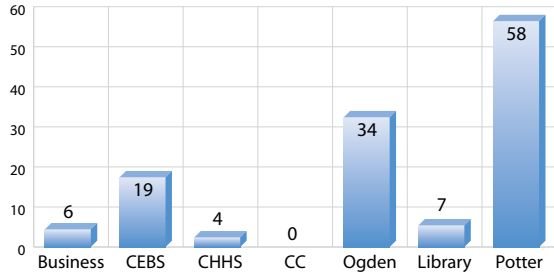
Award Dollars



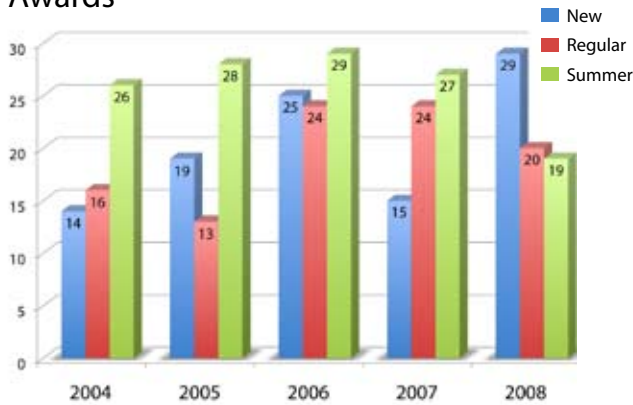
Faculty Scholarship Council

There were eight external grant proposals, one external grant award, seven posters, two manuscripts, 26 presentations, 26 student assistants, and 20 faculty collaborators at WKU and elsewhere among the 114 outcomes.

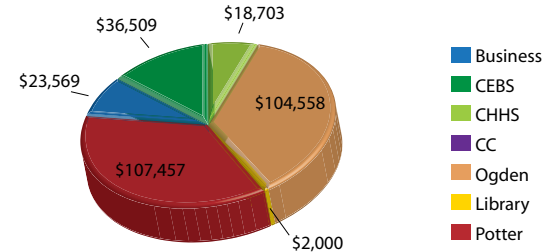
Outcomes



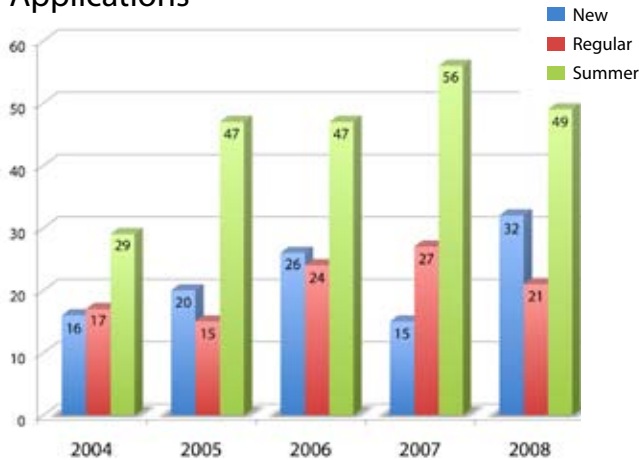
Awards



Expenditures



Applications



Dr. Huanjing Wang
Department of Mathematics
and Computer Science

Feature Selection and Data Mining

Dr. Wang was awarded a New Faculty Scholarship grant from the Faculty Scholarship Council at Western Kentucky University. She is working on the project "A Novel Feature Selection Approach for Large-Scale Data Set." The past two decades have seen a dramatic increase in the amount of data being electronically stored. Data quality is a central issue for data mining. One research area of data mining is feature selection. Feature selection attempts to find a feature subset that describes the data for a learning task as well as or better than the original dataset. A novel feature selection approach will be proposed through this project. The new approach will be tested for large-scale data set.

Human Subjects of Research Actions

Fiscal Year	Exempt	Expedited	Full Board	Rejected	Total	Faculty/ Staff	Students
2001	9	61	20	18	108	53	55
2002	12	82	12	9	115	45	70
2003	18	61	33	24	138	57	81
2004	37	59	19	7	122	65	57
2005	9	161	14	10	194	113	81
2006	24	165	16	5	210	91	119
2007	55	152	14	3	224	115	109
2008	77	118	15	4	214	101	113

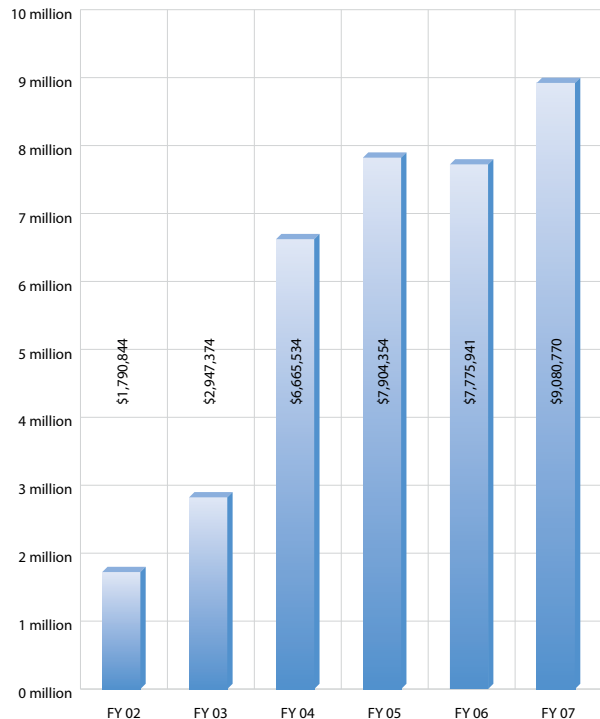


Dr. Carrie Pritchard
*Department of Psychology, College of
 Social and Behavioral Sciences*

Autism Research

Dr. Carrie Pritchard investigates social skill development in children with autism spectrum disorders (ASD). Children with ASD exhibit social skills deficits and usually require support in order to succeed as members of social groups. How much and what kind of support is an open question. Dr. Pritchard investigated what might be considered an “optimal support model” in which children received only as much adult facilitation as necessary to be successful. Not surprisingly, compared to a control group, the children disagreed more often. However, they also negotiated their own solutions, engaged in more problem solving, and interacted more with their peers than with adult facilitators. Dr. Pritchard believes that the counter-intuitive choice to mindfully reduce support may increase the social cues available to children and thus promote their social development.

The Western Kentucky University Research Foundation, Inc. Total Assets





Office of Sponsored Programs

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