

2008-2009 Annual Report Office of Sponsored Programs



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Foreword

It is my pleasure to present the Office of Sponsored Programs Annual Report for fiscal year 2009. The grants and sponsored awards presented in this report reflect the good work of many people here at ISU. Congratulations go to the faculty, staff, and students who submitted proposals or were awarded in FY 09.

This year, we have chosen to highlight the Noyce Scholars Program, which provides scholarship funds for science, technology, engineering, and mathematics majors wishing to become K-12 teachers. We have also spotlighted Dr. Allan Albig and his AREA award from the National Institutes of Health. Albig's grant provides support for graduate and undergraduate student researchers investigating the causes of cancer at the molecular level. These grants benefit the whole university by creating opportunities for talented students to attend ISU, earn wages for their efforts, and fill much needed roles in the workforce of Indiana.

Although grant revenue in FY 09 was down slightly from the previous year, proposal submissions saw an increase of 30% over FY 08 levels. This upsurge in proposal submissions will most certainly lead to higher funding levels in upcoming years as awards are made.

President Bradley has made clear his vision for growth in grant revenue at ISU over the next several years. Increasing grant awards to unprecedented levels is possible, but it will require changes in how we do business at ISU, how workloads are structured, and how grant seeking is incentivized. The staff of OSP is ready to do all we can to make this vision a reality. Let us know how we can help you grow.

Congratulations again to awardees, and to all those who submitted proposals in fiscal year 09. We look forward to working with you in the future.

Warmest Regards,



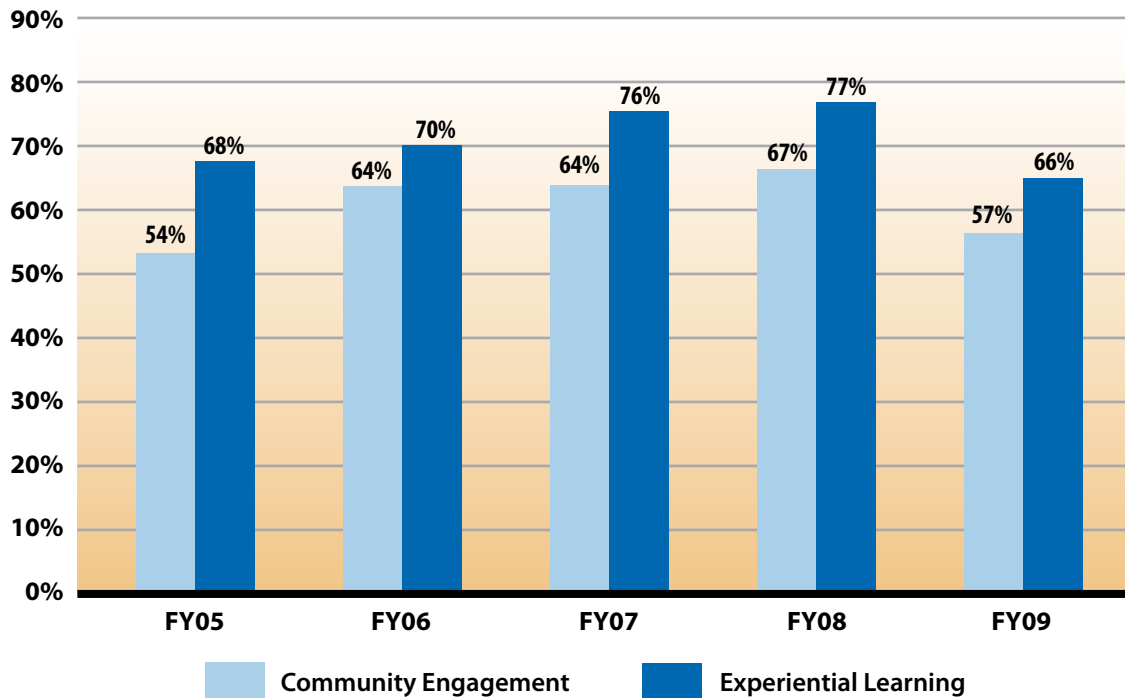
Dawn F. Underwood
Director, Office of Sponsored Programs



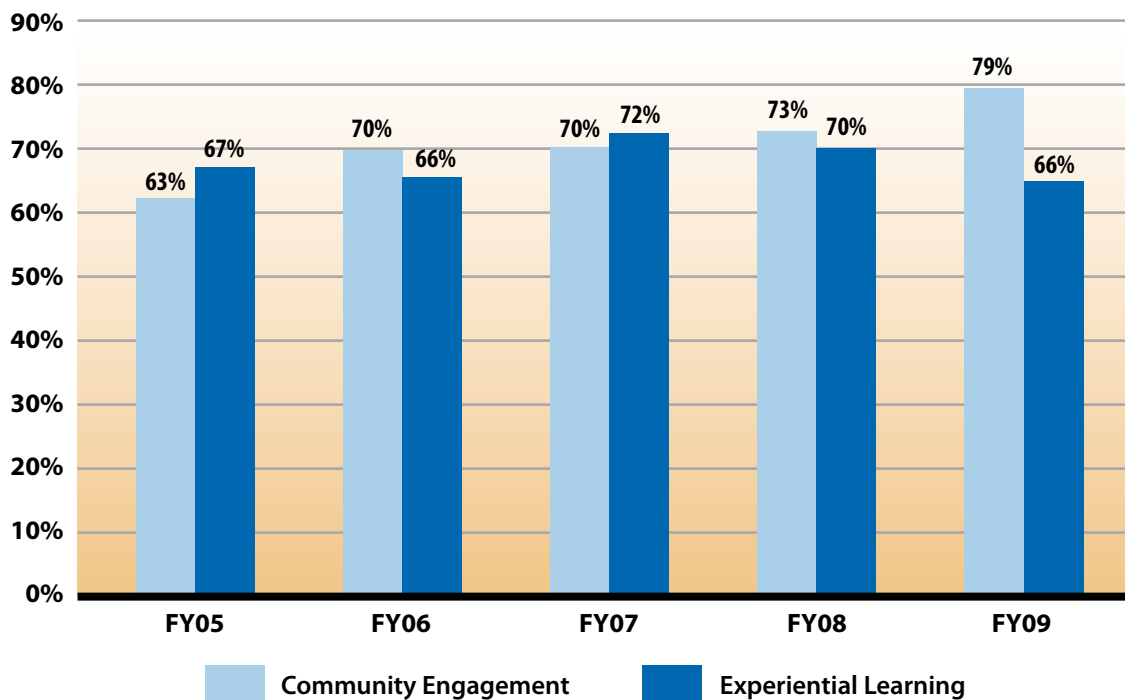
Summary of Office of Sponsored Programs Activities

External grants submitted	228
Contracts (Incoming to ISU)	45
Renewal awards	13
IRB applications, modifications, continuations, and completion reports	271
Undergraduate student research applications	39
URC internal grant applications	27
UAEC internal grant applications	4
Intellectual property disclosures	3
Copyright acknowledgements	13
Material transfer agreements/licensing	3
Faculty travel assistance	6
Grant writing workshop attendees	82
Classroom presentation attendees	291
Compliance brown bag attendees	31
Community presentation attendees	245

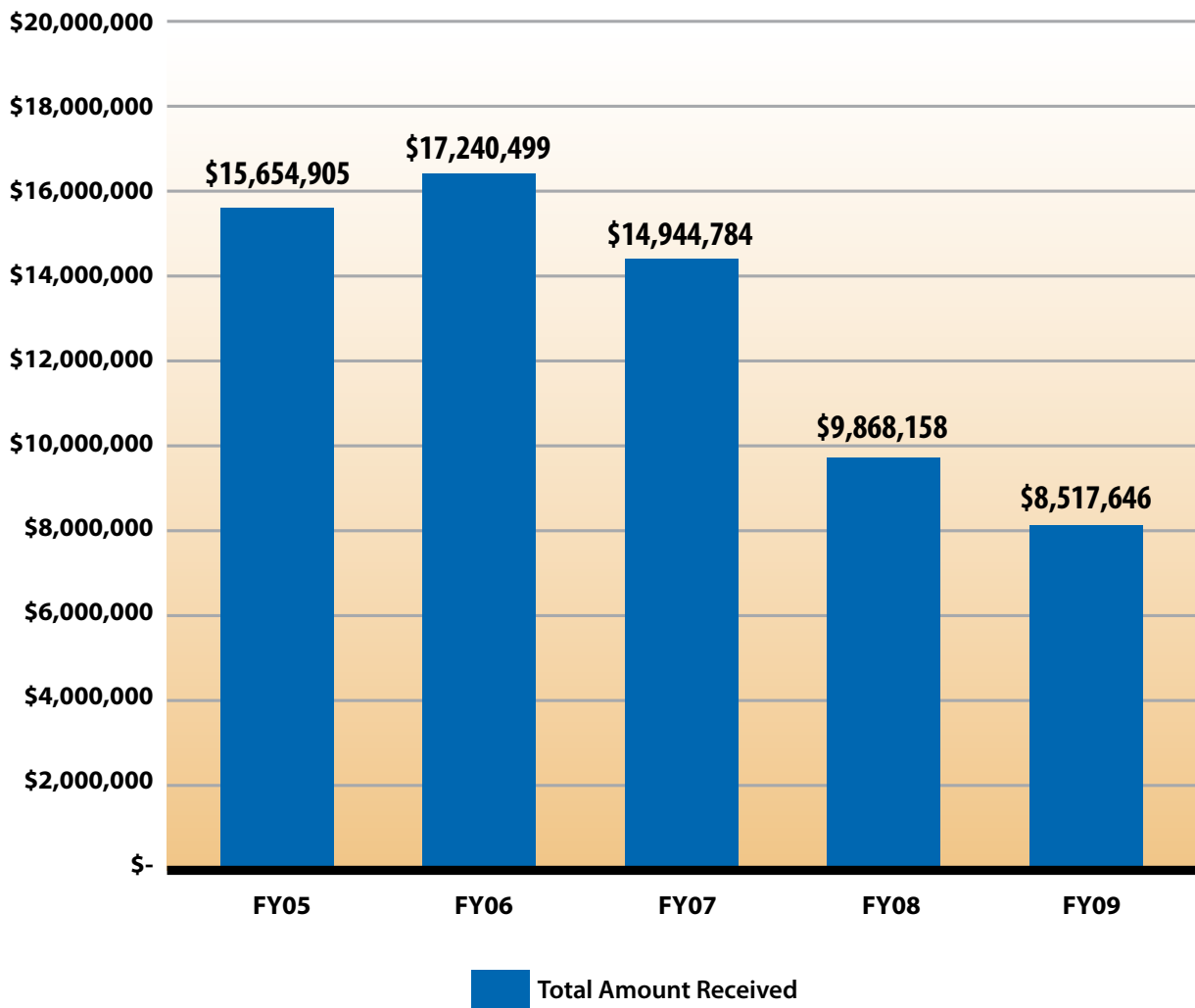
Proposals Including Special Initiatives



Awards Including Special Initiatives

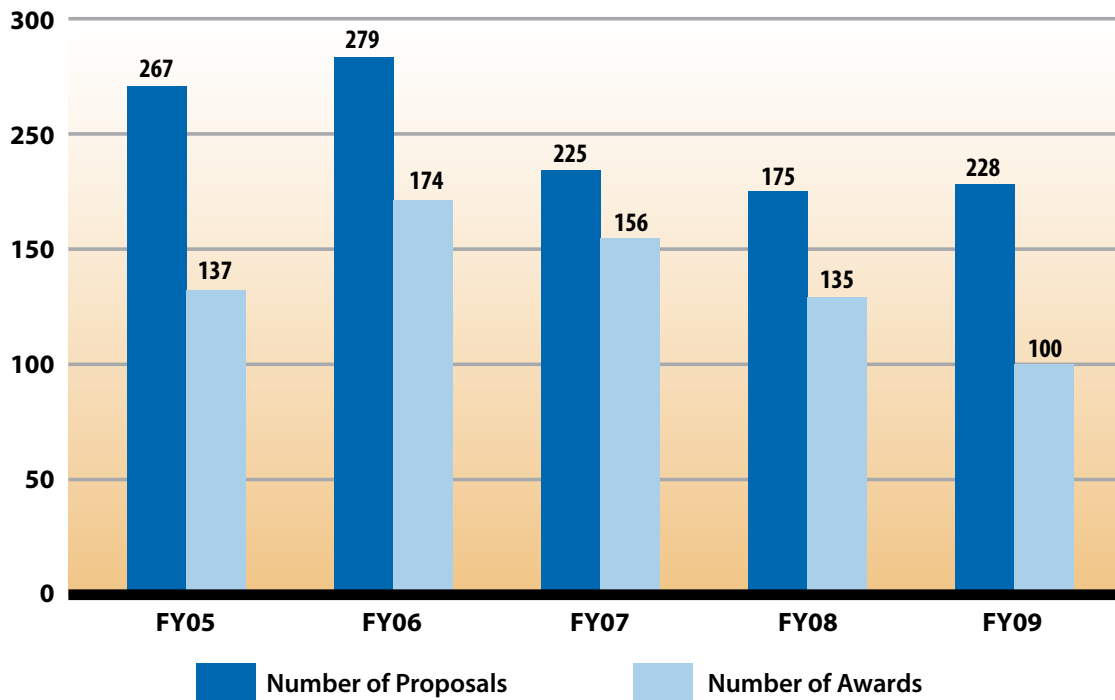


Five-Year History of Grant and Contract Awards



Note: Includes select awards administered by the ISU Foundation.

Five-Year History of Grant and Contract Activity



Note: Beginning in FY2007, grant renewals are not counted as submitted proposals. For comparison purposes, the number of proposals including renewals would equal 245 in FY2007, 201 in FY2008, and 241 in FY2009.

NIH Grant Helps ISU Develop Cancer Researchers

Tissues are composed of more than cells alone. In fact, tissues are a collection of various types of cells, chemical signals, salts, carbohydrates, and water that are all suspended in a 3-dimensional network of protein based scaffolding. Collectively, the environment in which normal cells are embedded (their "microenvironment") is balanced and has critical input into normal cell behaviors. Tumors are also composed of more than mutated cells alone. In tumors, mutated cancer cells are also surrounded by a microenvironment. A big difference however is that tumor microenvironments are generally out of balance thus allowing and promoting abnormal cell behaviors such as continuous cell division, invasion, metastasis, and the ingrowth of new blood vessel branches which collectively are the most deadly aspects of cancer. Traditionally, therapeutic approaches to cancer treatment have focused on fighting only cancer cells, and have ignored the tumor microenvironment. This is unfortunate since recent data indicates that therapeutic targeting of tumor microenvironments is also a viable approach to treating cancer. Thus, combined therapies that target both cancer cells and the tumor microenvironment may prove to be the most efficacious approaches to cancer treatment.

The goal of Dr. Allan Albig's research is to learn about tumor microenvironments and use the information gathered to design new medicines to fight cancer by adjusting tumor microenvironments to a more normal state that will repress instead of activate the deadly aspects of cancer. Towards this goal, a major focus of the lab is to identify new components of the extracellular matrix that impact tumor angiogenesis. Simultaneously, Albig and student researchers are also characterizing the molecular mechanisms whereby previously identified regulators of angiogenesis regulators function.

To support this work, Allan Albig received a \$153,063 AREA (R15) award from the National Institutes of Health (NIH). A major goal of this award mechanism is specifically to support student development (graduate and undergraduate) at institutions that have not historically received major NIH support (i.e. RO1 support). The award supports one graduate student and one undergraduate student for all three years of the project period. NIH funds will also be used to allow these students to attend two professional conferences to further their research development.

No matter how great an idea is, ideas do not go anywhere without skilled hands to push them along. Therefore, in the spirit of the AREA award, the lab has been very fortunate to recruit an excellent team of undergraduate and graduate students to perform the bulk of the experiments. These students perform a variety of experiments ranging from micro-, cell-, and molecular biology, to working with animal models of human disease.

Eventually, we will all win through increased knowledge of a disease that in 2007 killed 7.6 million people, and through the training of the next generation of medical researchers and medical professionals to help cancer patients. The students of today will be



Front Row (left to right): Leslie Brown, Kristen Land, and Mariam Alawoki
Back Row (left to right): Bikram Sharam, Dr. Allan Albig, and Kent Williams

(continued next page)

our caregivers of tomorrow.

"I have to give credit to these budding young researchers as they face off daily against failed experiments, contaminated cell culture, and mice with an acquired taste for human flesh. As my previous mentor so poetically said, 'one day in science might be great, but the next day, science will kick you in the _____' (fill in your favorite part of the human anatomy!). In the end however, these dedicated students all keep coming back for more and I owe them a great deal for that."

Quote from Dr. Allan Albig



Leslie Brown, she is a sophomore, biology major.

Robert Noyce Teacher Scholarship

Indiana State University received its first award of the Robert Noyce Teacher Scholarship Program in 2005. Four years later, and with 21 Noyce scholars having successfully completed the program, ISU has a new Noyce Scholars Program (NSP) Management Team and a new Phase II award of \$590,600 to continue the program for another four years.

The Noyce Scholars Program (NSP) at ISU is funded through a grant from the National Science Foundation. The program seeks to recruit and retain talented science, technology, engineering, and mathematics (STEM) majors and professionals to become K-12 mathematics and science teachers. At ISU, NSP will provide scholarships for undergraduate math and science majors and post-baccalaureate students holding STEM degrees who commit to teaching in high-need K-12 school districts.

The NSP management team is led by Liz Brown, Associate Professor in Mathematics and Computer Science. Other team members, and Co-PIs on the proposal, are Jay Gatrell, Dean, School of Graduate Studies; Rusty Gonser, Associate Professor, Biology; Elaina Tuttle, Associate Professor, Biology; and Susan Powers, Associate Dean, College of Education. The Phase II program has added an intensive recruitment and selection process to an already innovative teaching pedagogy that will ensure the highest quality of science and math majors will become Noyce Scholars and future K-12 teachers. The goal of the four year project is to recruit 25 students to the NSP.

Noyce scholars are ideally positioned to affect the quality of science and math education in the high-need schools they are eventually placed in because of the teacher preparation they have received at ISU. Along with a strong concentration in the math or science major of their choice, Noyce scholars must also take teacher preparation courses. At ISU, teacher preparation utilizes innovative problem-based learning (PBL) pedagogies and clinical field experiences with high quality professional support and mentoring during the initial service period. For example, a Noyce scholar majoring in mathematics might learn how to develop real-life case studies for use in the classroom, which would require their prospective students to understand and work with linear equations. The case studies could replace traditional textbook-based unit on linear equations.

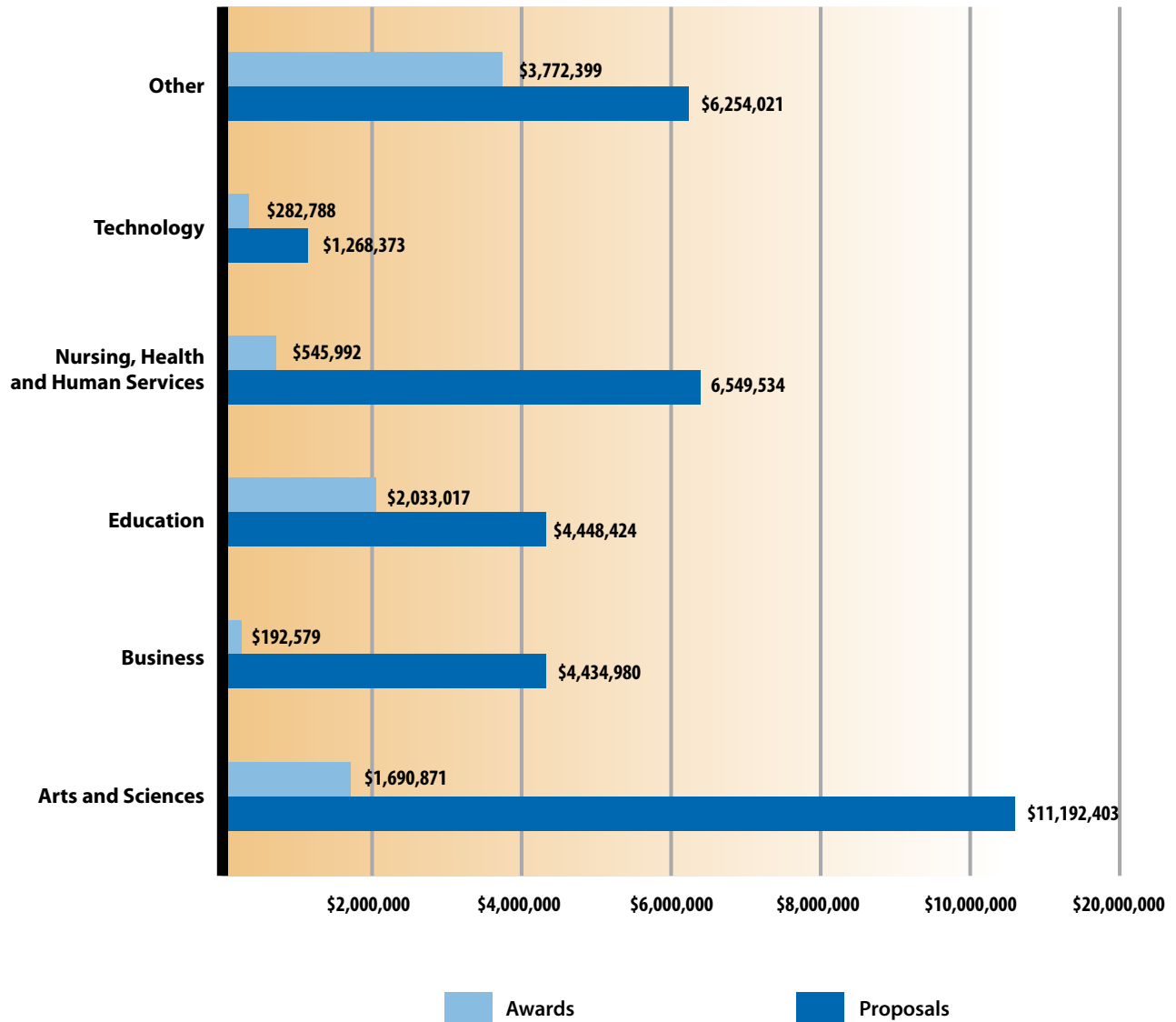
Noyce Scholars

Stormi Brake
Eric Graves
Alexis Keevers
Heather Nees
Michelle Puller
Rhena Worthington

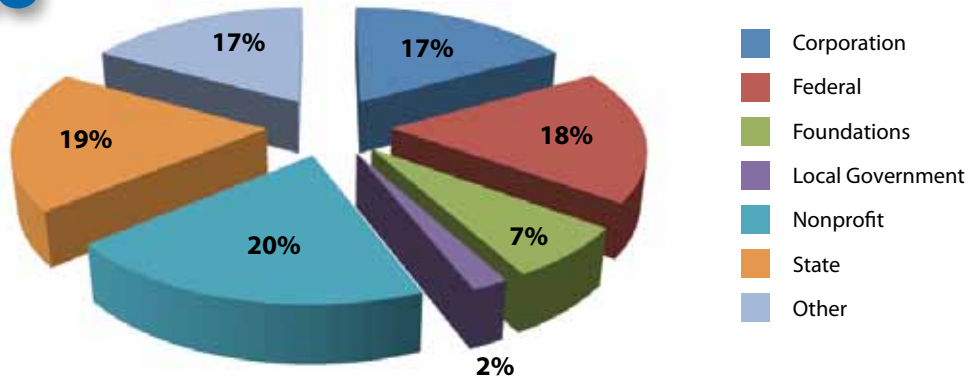
Current Placement

Broad Ripple High School
Terre Haute South High School
Creston Middle School
Cloverdale Middle School
West Vigo Middle School
South Vermillion Middle School

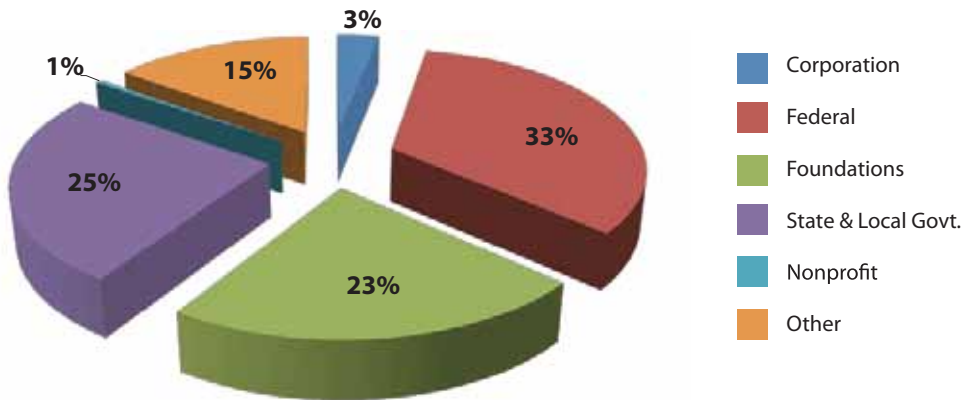
Grant Activity by Academic Unit



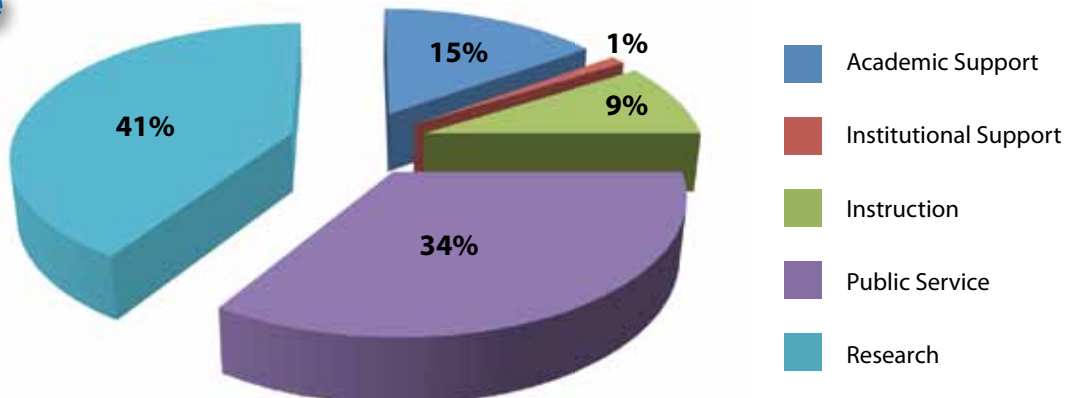
Percentage of Awards by Funding Source



Percentage of Awards in Terms of Dollars by Funding Source



Percentage of Awards by Activity Type





Number and Amount of Awards by Funding Source (Fiscal Years 2006-2009)

Sponsor	FY06		FY07		FY08		FY09	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
<i>Non-Federal:</i>								
Corporations	45	\$924,601	37	\$1,122,027	21	\$316,472	17	\$265,474
Foundations	10	\$7,555,067	10	\$5,057,815	3	\$2,511,632	7	\$1,922,862
Nonprofit	42	\$490,963	31	\$486,352	32	\$528,737	20	\$44,108
Other	14	\$1,030,535	24	\$725,650	29	\$838,125	17	\$1,274,370
State	26	\$2,818,799	25	\$4,334,899	26	\$2,861,976	19	\$2,154,334
Local Government	12	\$108,805	3	\$65,266	5	\$72,364	2	\$8,977
Subtotal of Non-Federal	149	\$12,928,770	130	\$11,792,009	116	\$7,129,306	82	\$5,670,125
<i>Federal:</i>								
NSF	8	\$1,103,130	8	\$562,320	3	\$59,665	6	\$1,038,365
Education	6	\$2,097,340	5	\$1,892,292	5	\$1,754,419	5	\$1,372,701
DHHS	5	\$914,801	6	\$356,448	3	\$253,752	2	\$239,058
USDA	1	\$10,000	1	\$8,000	1	\$2,400	0	\$0
Other Federal	5	\$186,458	6	\$333,715	7	\$668,616	5	\$197,397
Subtotal of Federal	25	\$4,311,729	26	\$3,152,775	19	\$2,738,852	18	\$2,847,521
Total	174	\$17,240,499	156	\$14,944,784	135	\$9,868,158	100	\$8,517,646

Submissions and Awards

	Proposals Submitted	Amount Requested	Awards Received	Amount Received
Academic Affairs				
Ctr for Bus. Support & Economic Innovation	2	\$8,500	2	\$8,500
Center for Public Serv and Comm Engagement*	9	\$226,612	8	\$360,152
Continuing Education	1	\$101,000		
Office of Sponsored Programs	2	\$4,644	2	\$4,644
School of Graduate Studies			1	\$222,819
South Central Education Association			1	\$147,000
Student Academic Services Center	1	\$474	2	\$702,313
Terre Haute Center for Medical Education	6	\$778,701	3	\$433,569
Sub-Total	21	\$1,119,931	19	\$1,878,997
Enrollment Management Marketing and Communication				
Admissions	1	\$14,999		
First year Programs	1	\$49,000		
Office of Vice President	1	\$3,998,988		
Sub-Total	3	\$4,062,987		
College of Arts and Sciences				
Art	2	\$7,050	1	\$7,773
Biology	65	\$3,893,214	21	\$674,452
Chemistry/Physics	7	\$2,265,785		
Criminology/Criminal Justice	2	\$189,851		
Economics	3	\$50,099	2	\$28,000
English	2	\$26,061		
Family and Consumer Sciences	1	\$149,869		
Geography, Geology and Anthropology	26	\$2,148,154	11	\$143,043
History				
Mathematics and Computer Science	7	\$1,174,823	2	\$594,600
Music	4	\$49,600	2	\$12,500
Political Science				
Psychology	5	\$1,017,042	1	\$22,397
Social Work	1	\$205,855	1	\$205,855
Theater	2	\$15,000	1	\$2,251
Sub-Total	127	\$11,192,403	42	\$1,690,871
College of Business				
Analytical Department	1	\$49,902		
Networks Finance Institute	1	\$4,244,808		
Organizational Dept.	1	\$3,086		
West Central Indiana SBDC	3	\$46,184	5	\$192,579
Sub-Total	6	\$4,343,980	5	\$192,579

	Proposals Submitted	Amount Requested	Awards Received	Amount Received
College of Education				
Blumberg Center	8	\$1,428,556	4	\$1,336,233
CCITE	4	\$165,000		
CDCSEP	3	\$616,470	1	\$108,460
Curriculum, Instruction and Media Technology	1	\$5,000		
Dean's Office	2	\$176,060	2	\$176,060
Ed. Leadership, Administration, and Foundations	2	\$683,416		
Educational Research and Evaluation	1	\$73,710		
Elementary, Early, and Special Education	7	\$1,199,212	5	\$412,264
Sub-Total	28	\$4,347,424	12	\$2,033,017
Library Services				
Acquisitions	1	\$23,920		
Dean's Office	2	\$281,702	1	\$280,702
Reference	3	\$194,924		
Sub-Total	6	\$500,546	1	\$280,702
College of Nursing, Health and Human Services				
Advanced Practice Nursing	1	\$4,227,532	1	\$85,995
Athletic Training	2	\$66,794	2	\$66,794
Dean's Office	1	\$335,203	1	\$335,203
Health, Safety, and Environ Health Science	6	\$1,912,715	1	\$54,250
Physical Education	3	\$7,290		
Recreation and Sport Management			1	\$3,750
Sub-Total	13	\$6,549,534	6	\$545,992
College of Technology				
Aviation Technology	3	\$266,386		
Dean's Office	1	\$3,000	1	\$3,000
ECMET	2	\$218,488	1	\$140,245
Industrial Technology Education	1	\$625,499		
Technology Management	8	\$155,000	8	\$139,543
Sub-Total	15	\$1,268,373	10	\$282,788
Student Affairs				
Public Safety	4	\$334,293	3	\$17,932
Student Counseling Center	5	\$337,264		
Sub-Total	9	\$671,557	3	\$17,932
Business Affairs				
Facilities Management			1	\$14,375
Sub-Total	0	\$0	1	\$14,375
Office of the President				
Office of the President*	0	\$0	1	\$1,580,393
Sub-Total	0	\$0	1	\$1,580,393
Year-to-Date Totals	228	\$34,056,735	100	\$8,517,646

*Includes activity administered through the ISU Foundation

Grants Awarded

Acree, Esther, Advanced Practice Nursing. Health Resources and Services Administration, \$85,995. *Advanced Education Nursing Traineeship (AENT) Program*. Federal program provides financial assistance for advanced degree nursing students.

Albig, Allan, Biology. National Institutes of Health, \$153,063. *Mechanisms by Which MAGP-2 Promotes Angiogenesis*. Since all solid tumors depend on the infiltration of new blood vessels (i.e. angiogenesis), strategies to block angiogenesis may provide therapeutic opportunities to treat cancer. To address this medical need, this proposal seeks to characterize new molecules and mechanisms by which angiogenesis is controlled so that we can one day use this information to block angiogenesis and combat cancer.

Angilletta, Michael, Biology. Co-PI: Mitchell, William. National Science Foundation, \$5,951. *REU Supplement: Toward a spatially explicit theory of thermoregulatory behavior*. This REU will fund an undergraduate student to participate in Angilletta's thermoregulation research during the 2009 summer at the Sevilleta National Wildlife Refuge in New Mexico.

Balch, Bradley, Dean's Office (COE). Co-PI: Libler, Rebecca. Academy for Educational Development, \$2,250. *Teachers for a New Era Learning Network Activities*. Travel funds for the "Teacher for a New Era Learning Network".

Berta, Susan, Geography, Geology, and Anthropology. Co-PI: Underwood, Dawn. Purdue University, \$750. *Indiana Space Grant Consortium Outreach: Research/Education Opportunities for Indiana State University Students, Faculty, and Staff*. Funds to be used to promote the Indiana Space Grant Consortium to the ISU campus and local community.

Boothby, Jennifer, Student Academic Services Center. State of Indiana, \$280,702. *Twenty-first Century Scholars Program*. Funding to support the Twenty-first Century Scholar program at ISU. The program provides tuition scholarships to students who might not otherwise attend college.

Brown, Elizabeth, Mathematics and Computer Science. Co-PI: Harmless, Kay. Mathematical Association of America, \$4,000. *M2 for Girls (Mathematics and Mentoring for Girls)*. M2 is designed to create a mentoring and enrichment program for female middle school students to create a sense of excitement and pride about being math savvy. ISU's Center for Mathematics Education will partner with the Center for Collaboration and Innovation in Teacher Education. Mathematics faculty will develop activities to

deepen knowledge and participation of young women in mathematics. The goal is to encourage middle school girls to enroll in higher level math classes and consider careers in the math related fields.

Brown, Elizabeth, Mathematics and Computer Science. Co-PI: Tuttle, Elaina; Powers, Susan; Gonser, Rusty; Gattrell, Jay. National Science Foundation, \$590,600. *The Robert Noyce Scholars Program at Indiana State University: Phase II Scholarship & Stipend*. The Robert Noyce Scholars Program (NSP) at Indiana State University (ISU) aims to increase the number and retention rates of well-prepared, licensed secondary school teachers in science and mathematics in high needs schools, such as Vigo County School Corporation, in order to improve student learning in STEM areas.

Cockrell, Gerald, Electronics, Computer, and Mechanical Engineering Technology. Co-PI: Ashby, Joe; Kinley, Edward. National Science Foundation, \$140,245. *Collaborative Research: Automation Tek Hands-On Remote Labs Automation Curriculum*. Second year of funding for research and curriculum development on industrial automation.

Coleman, Kenneth, Student Academic Services Center. U.S. Department of Education, \$381,215. *Upward Bound at Indiana State University*. Third year of funding for the four year project period of Upward Bound at ISU.

Conant, John, Economics. Indiana Council for Economic Education, \$20,000. *Center for Economic Education Operational Budget*. Annual support of ISU's Center for Economic Education.

Conant, John, Economics. Indiana Council for Economic Education, \$8,000. *Center for Economic Education Continuation Grant*. The Indiana Council for Economic Education awarded additional funding to the ISU Center for Economic Education for the 08/09 academic year to cover the costs of a Program Consultant.

Cooper*, Brandon, Biology. Co-PI: Angilletta, Michael. Indiana Academy of Science, \$2,554. *Towards a quantitative theory of physiological acclimation*. This study provides the first empirical test of an optimality model of physiological acclimation.

*Students

Cutter, Lisa, Elementary, Early and Special Education. Co-PI: Quatroche, Diana; Bauserman, Kathryn. Indiana Commission for Higher Education, \$160,846. *Reading with a Difference*. Reading with a Difference is a professional development program for K - 12 teachers that will offer instruction on differentiated instruction.

Cutter, Lisa, Elementary, Early, and Special Education. Co-PI: Gatrell, Jay; Powers, Joshua; Hofmeister David; Quatroche, Diana. U.S. Department of Education, \$237,476. *PRE Too! Preparing and Recruiting Underrepresented Teachers for Indianapolis Public Schools*. Year two funding of the three year PRE Too! Project.

Damm*, Jason, Biology. Co-PI: Whitaker, John O., Jr. Indiana Academy of Science, \$1,210. *The effects of enclosure size on the agonistic behaviors of two species of vole, *Microtus pennsylvanicus* and *Microtus ochrogaster**. Research to determine the relationship between enclosure size and aggressive behaviors using two species of voles.

Edwards, Jeffrey, Athletic Training. Co-PI: Demchak, Timothy. Vigo County School Corporation, \$66,000. *Athletic Training Services to Terre Haute South, Terre Haute North, and West Vigo High Schools*. Students enrolled in the Master of Science in Athletic Training program provide athletic training services to three area high schools.

Feinsod, Arthur, Theater. Indiana Arts Commission/Arts Illiana, \$2,251. *The Fantastiks Project*. Funding will support the production of "The Fantasticks" with a diverse cast, ideally including a deaf actor to play the Mute, an Hispanic actor to play El Gallo, an African American actress to play Luisa, either an African American or Asian actor to play her father, and a Native American actor to play Mortimer. This will diversify not only the cast of this one show but, since these actors will also play roles in the other three shows of the season, diversify the casts throughout the 2009 season.

Foster, Tad, Technology. ATAIN, \$3,000. *Motorsports Networking Workshop*. Funding will help cover some of the costs of a Motorsports Studies Workshop.

Fowler, Kurt, Music. National Endowment for the Arts, \$10,000. *43rd Contemporary Music Festival*. The three-day festival brings internationally acclaimed composers, contemporary music performers, and speakers to West-Central Indiana. Members of surrounding communities, university students, and guests from across the country will attend and participate in performances, educational activities, discussions, and social events focusing on trends in contemporary musical expression.

Fowler, Kurt, Music. Indiana Arts Commission/Arts Illiana, \$2,500. *42nd Contemporary Music Festival*. Support for the 42nd Contemporary Music Festival which will take place on November 11 - 14, 2008. The three-day festival will bring internationally acclaimed composer Dan Locklair, the Indianapolis Chamber Orchestra, Fulcrum Point New Music Project, and other guests to West Central Indiana.

Gatrell, Jay, Geography, Geology, and Anthropology. Co-PI: Steiger, Thomas; Conant, John. The Ohio State University Research Foundation, \$31,550. *Competitiveness of Ohio Greenhouses, subcontract to larger USDA*. The ISU research team will conduct semi-structured interviews with up to 20 greenhouse growers to determine the scale and scope of changing business practices.

Gatrell, Jay, College of Graduate and Professional Studies. Co-PI: Pearcey, Matt. U.S. Department of Education, \$222,819. *McNair Postbaccalaureate Achievement Program*. This is the second year of a four year funding cycle. The ISU Ronald E. McNair Postbaccalaureate Achievement Project works with disadvantaged college students in Indiana to motivate and assist them to attain a postbaccalaureate education.

Ghosh, Swapan, Biology. Cook Biotech, Inc., \$100,510. *Adjuvency of Extracellular Matrix*. Project to test the efficacy of new materials to be used as adjuvants in the production of vaccines.

Gikas*, Nicholas, Biology. Co-PI: Whitaker, John O., Jr. Indiana Academy of Science, \$1,905. *Ectoparasites of bats in Indiana: Effects on nocturnal behavior and roost switching*. Study will examine whether heavier loads of ectoparasites affect the size of a bat's home range and whether ectoparasites cause bats to switch roosts.

Goehl, Karen, Blumberg Center. Indiana Department of Education, \$322,520. *Project Vision and the Deaf and Hard of Hearing Project*. The purpose of Project Vision and the Deaf and Hard of Hearing Project is to provide information, support, technical assistance and training to families, local educational teams, and agencies that provide services to learners who are blind or have low vision.

Goehl, Karen, Blumberg Center. U.S. Department of Education, \$210,093. *Indiana Deafblind Services Project*. Indiana Deafblind Services Project State Technical Assistance Project to provide technical assistance and training for educators and families of children and youth who are deafblind, in collaboration with other agencies and projects.

*Students

Gonser, Rusty, Biology. Saint Mary of the Woods College, \$2,000. *Continuing an Innovative Wabash Valley Science Community Seminar Series, "From Molecules to Ecosystems"*. This project supports Wabash Valley Science Community for the purpose of broadening the scope of scholarship opportunities between science faculty at ISU and SMWC.

Gottschling, Gail, Elementary, Early and Special Education. Wabash Valley Community Foundation, \$5,000. *ISU ECEC Pre-School Scholarship project*. Funding will provide scholarships to deserving children attending the Early Childhood Education Center Pre-school at Franklin Elementary School.

Gottschling, Gail, Elementary, Early and Special Education. Wabash Valley Community Foundation, \$4,942. *ISU ECEC Infant Toddler Playground Project*. Funding to renovate existing infant-toddler playground.

Gottschling, Gail, Elementary, Early, and Special Education. Wabash Valley Community Foundation. \$4,000. *Franklin Preschool Scholarship Project*. ISU's Early Childhood Education Center requested funding to provide full scholarships to children attending the pre-school program at Franklin Elementary School.

Hawkins, Bret, South Central Education Association. U.S. Department of Housing and Urban Development, \$147,000. *Remodeling of ISU Community Learning Center of Lawrence County to Increase Classroom Space*. Funding to increase the capacity of the Community Learning Center of Lawrence County, located in Bedford, IN.

Henderson, Stanley, Health, Safety, and Environmental Health Sciences. Indiana Department of Education, \$54,250. *Indiana Department of Education and Indiana State University Motorcycle Training Program*. Project Director will conduct motorcycle safety courses for novice and experienced motorcycle drivers.

Jamison*, Amanda, Biology. Co-PI: Tuttle, Elaina. Sigma Xi, \$400. *The Importance of Codependency: an Investigation into the Avian Host-Parasite Relationship*. This research will combine field research, molecular techniques, and remote sensing/GIS to examine how three haematozoan parasites affect fitness in the polymorphic white-throated sparrow (*Zonotrichia albicollis*).

Johnson, Mary, Terre Haute Center for Medical Education. Indiana University, \$36,117. *Carageenan Induced Inflammation*. The objective of the proposed animal study is to quantify the dose and treatment regimen for a recently discovered pulsing electromagnetic fields (PEMF) signal which was reported in a preliminary study to accelerate skin wound healing in a rat model.

Korody*, Marisa, Biology. Co-PI: Tuttle, Elaina. Indiana Academy of Science, \$1,387. *Evidence for multiple mechanisms of segregation distortion in the white-throated sparrow*. Project examines variation in sperm production by male white-throated sparrows to confirm segregation distortion in males of this species and determine whether distortion varies with spatial and/or temporal environmental variability. Determining examples of autosomal drive in this species may also illuminate segregation distortion in other avian species with chromosomal inversions.

Kristeller, Jean, Psychology. University of California San Francisco, \$22,397. *Metabolic and Immunological Effects of Meditation*. Kristeller will work with investigators at the University of California, San Francisco to extend the program she developed, Mindfulness-Based Eating Awareness Training, to address stress reduction.

Lannoo, Michael, Terre Haute Center for Medical Education. Indiana University, \$395,060. *Local and Landscape Habitat Associations, Population Ecology, and Future Recovery of Crawfish Frogs (*Rana areolata*) in Indiana*. This study will identify current areas of habitation, develop landscape habitat models, collect tissue samples, and potential pathogens, and provide management recommendations to the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service related to crawfish frogs.

Latimer, Jennifer, Geography, Geology, and Anthropology. Indiana University - Purdue University Indianapolis, \$2,970. *A Novel Way for Teaching Global Environmental Changes at IUPUI and ISU*. Latimer will work with faculty at IUPUI to combine a field trip and course development to enrich learning experiences for undergraduates at IUPUI and ISU.

Latimer, Jennifer, Geography, Geology, and Anthropology. Co-PI: Maynard, C. Jack. Purdue University, \$49,336. *Louis Stokes Alliance for Minority Participation Indiana, phase II*. Increase in funding for the LSAMP program.

Lugar, Robyn, Social Work. Co-PI: Impink, Rhonda; Weber, Peggy. Indiana University, \$205,855. *Child Welfare Training - Title IV-E*. This is a three year contract to continue the Child Welfare Training program in collaboration with IUPUI. This program will help up to 6 social work students each semester (Fall and Spring) over the next three years with tuition and some expenses.

*Students

Mercier, William, Public Safety. Co-PI: Ditz, Meredith; Hall, Kelly. Vigo County Local Coordinating Council, \$7,777. *Campus Alcohol and Drug Awareness*. Funds to purchase an in-car DVD-video system for one police car, as well as, additional funds to cover over-time pay to increase campus officers presence to strengthen enforcement of DUI, alcohol and drug laws.

Mercier, William, Public Safety. Co-PI: Ditz, Meredith; Hall, Kelly. Indiana Department of Homeland Security, \$4,930. *Homeland Security Grant Program Sub-grant Agreement Law Enforcement Terrorism Prevention Program*. Funds to be used to purchase ten bulletproof vests and a training course on Hazardous Materials and Terrorism Awareness.

Mercier, William, Public Safety. Co-PI: Smith, Jacquelyn; Hall, Kelly. Indiana Criminal Justice Institute, \$5,225. *Operation PullOver*. Public Safety will participate in the state's Operation PullOver.

Millar*, Pete, Center for Public Service and Community Engagement. Co-PI: Rogers, Nancy. Youth Service America, \$858. *Semester of Service*. Student Service-Learning project will mobilize ISU students to assist victims of the June '08 floods in Terre Haute.

Nellis, Leah, Blumberg Center. Indiana University, \$73,765. *Early Childhood Environmental Rating Scale (ECERS) Project*. ISU is participating on the Indiana State Improvement Grant to improve early childhood programs and transitions.

Nellis, Leah, Blumberg Center. Indiana Department of Education, \$729,855. *Collaborative Problem Solving Project*. This project provides support to the statewide implementation and evaluation of a systematic integration of evidence-based practices, ongoing student assessment and data-based decision making within a school culture characterized by effective leadership, family and community partnerships, and cultural competency.

Obermeyer, Nancy, Geography, Geology, and Anthropology. Indiana University - Purdue University Indianapolis, \$28,432. *Level 1 HAZUS-MH Flood Analysis for Selected States*. National Institute of Building Sciences has requested an analysis of flood risk for selected states. ISU as part of the Coalition of Universities for Spatial Information Science (CUSIS) will be responsible for the analysis of 499 counties across seven states. Nancy Obermeyer will serve as Project Manager for ISU.

Penney, Heather, Small Business Development Center. Indiana Economic Development Corp, \$19,275. *West Central Small Business Development Center*. Grant funds are used to host the West Central Small Business Development Center which serves the Indiana counties of Clay, Parke, Putnam, Sullivan, Vermillion and Vigo.

Penney, Heather, Small Business Development Center. Indiana Economic Development Corp, \$11,594. *West Central Small Business Center*. Grant funds are used to host the West Central Small Business Development Center which serves the Indiana counties of Clay, Parke, Putnam, Sullivan, Vermillion and Vigo.

Penney, Heather, Small Business Development Center. Indiana Economic Development Corp, \$131,080. *West Central Indiana Small Business Development Center*. Proposal to host the West Central Indiana Small Business Development Center for 2009.

Penney, Heather, Small Business Development Center. Indiana Economic Development Corp, \$15,315. *West Central Indiana Small Business Development Center*. Funds to be used to host the West Central Small Business Center in the College of Business. Center to serve the counties of Clay, Parke, Putnam, Sullivan, Vermillion and Vigo.

Penney, Heather, Small Business Development Center. Indiana Economic Development Corp, \$15,315. *West Central Indiana Small Business Development Center*. State funding to support the ISBDC regional office on the ISU campus.

Pittelkow, Richard, Center for Business Support & Economic Innovation. Co-PI: Narczewska, Magda. Purdue University, \$5,000. *University Liaison for the Indiana Center for Assistive Technology (CAT)*. The CBSEI will be a portal for information and tools to help individuals with disabilities, case workers, companies, and innovators.

Pittelkow, Richard, Center for Business Support & Economic Innovation. Reel Time Logistics, \$3,500. *Business Plan Development*. CBSEI will complete a detailed business plan including a detailed plan for strategic, planned growth of the Company and a 3 to 5 year financial projection.

*Students

Powers, Susan, Dean's Office. Lilly Endowment, Inc., \$173,810. *Extending Teacher Creativity 2009: A Summer Workshop and Teaching Academy for Teacher Creativity Fellows*. The Teacher Creativity Workshop brings together 100 of the best and brightest teachers in Indiana to share teaching highlights, learn new skills and to generally "recharge" their batteries. In addition to the summer workshop there will be fall and spring meetings for workshop participants to reconnect and the establishment of electronic discussion groups so participants may support one another throughout the year.

Rathbun*, Nathan, Biology. Co-PI: Tuttle, Elaina. Sigma Xi, \$400. *Choice, Copulation & Color: The Effect of Plumage on Alternative Strategies*. The study is the important first step to elucidating how plumage variation affects large-scale patterns of natural and sexual selection in nature.

Rathburn, Anthony, Geography, Geology, and Anthropology. National Science Foundation, \$15,000. *RET Supplement*. Research Experience for Teacher (RET) Supplement will fund experiential learning activities for a rural science teacher, Brian Wrightsman, who will actively participate in international research and educational activities at sea, in the laboratory and in the classroom.

Rathburn, Anthony, Geography, Geology, and Anthropology. National Science Foundation, \$280,514. *Collaborative Research: Structure, Function and Evolution of Authigenic, Methane-Derived Carbonate Ecosystems*. Dr. Rathburn will conduct research with faculty from University of California - San Diego Scripps Institute of Oceanography and California Tech to study seep carbonate ecosystems.

Reed, Paul, Facilities Management. Co-PI: Lewis, Cherie K.; Tyler, Deanna. Indiana Department of Environmental Management, \$14,375. *Western Indiana Community e-Scrap Collection*. ISU Recycle Center, TREES Inc., and Workforce, Inc. have formed a partnership to allow for the collection, handling, and storage of e-scrap donated on a daily basis. TREES will provide community education and media support and volunteer energy.

Roberts-Pittman, Bridget, Communication Disorders and Counseling, School and Educational Psychology. Co-PI: Krug, Damon. Indiana Department of Education, \$108,460. *Indiana Training Alternatives in School Psychology*. This project will offer the Educational Specialist degree in School Psychology for current educators. The project will help meet the increasing demands for school psychologists in our state. Upon completion of the program, graduates will be license-eligible and employable as school psychologists.

Rogers, Nancy, Center for Public Service and Community Engagement. Wabash Valley Community Foundation, \$12,927. *Indiana EASE*. ISU is a participating partner in the Indiana EASE (Encouraging Access and Success in Education) program in Vigo County. ISU provides some mentors to selected middle school students, and a program coordinator works in CPSCE.

Rogers, Nancy, Center for Public Service and Community Engagement. Office of Faith Based and Community Initiatives, \$35,007. *AmeriCorps Recovery*. Funding will enable Sycamore Service Corps to support 5 half-time members to provide service in Vigo County. Priority for hosting members will be given to organizations serving individuals and families who recently experienced unemployment or other hardships related to the economic downturn.

Rogers, Nancy, Center for Public Service and Community Engagement. North Carolina Campus Compact, \$500. *MLK Day of Service*. Funding to support special volunteer activities in observance of Martin Luther King Day.

Rogers, Nancy, Center for Public Service and Community Engagement. Office of Faith Based and Community Initiatives, \$168,195. *AmeriCorps State*. Annual award for state funds to support the Sycamore Service Corps.

Schafer, Marion, Technology Management. MSI Packaging Company, \$12,500. *Package Testing Research/Development*. Indiana Packaging Research and Development Center will perform research and testing to provide new and redesigned packaging for the products produced by MSI Packaging Company.

Schafer, Marion, Technology Management. Keihin Corporation, \$12,500. *Package Testing Research/Development*. Indiana Packaging Research and Development Center will perform research and testing to provide new and redesigned packaging for the products produced by Keihin Corporation.

Schafer, Marion, Technology Management. AGI Polymatrix, \$12,500. *Package Testing Services*. Indiana Packaging Research and Development Center will perform research and testing to provide new and redesigned packaging for the products produced by AGI Polymatrix.

Schafer, Marion, Technology Management. Digital Audio Disc Corporation, \$12,500. *Package Testing Research/Development*. Indiana Packaging Research and Development Center will perform research and testing to provide new and redesigned packaging for the products provided.

*Students

Schafer, Marion, Technology Management. Biomet Manufacturing Corporation, \$25,000. *Package Testing and Research*. Indiana Packaging Research and Development Center will perform research and testing to provide new and redesigned packaging for the products produced by Biomet.

Schafer, Marion, Technology Management. Cra-Wal Container, \$25,000. *Package Testing Research/Development*. Indiana Packaging Research & Development Center will perform research and testing to provide new and redesigned packaging for the products produced by Cra-Wal Container.

Schafer, Marion, Technology Management. Newark Paperboard Products, \$25,000. *Package Testing Research/Development*. Indiana Packaging Research & Development Center will perform research and testing to provide new and redesigned packaging for the products produced by Newark Paperboard Products.

Schaumleffel, Nathan, Recreation and Sport Management. Indiana Campus Compact, \$5,000. *Indiana Rural Recreation Development Project: An Integrated Project to Engage Students and Serve Communities*. Faculty fellowship project which has Recreation Management students working with citizens of Clay City to increase outcome-based recreation programming for youth and seniors by utilizing community organizing skills to increase community recreation services on a shoestring budget that address critical community issues of obesity, health and active aging, economic development, and increasing community satisfaction through low-cost, close to home recreation opportunities.

Smallwood, James, Manufacturing and Construction Technology. Indiana University - Purdue University Indianapolis, \$14,543. *2008-2009 Professional Development for Workplace Specialist I Certification of Vocational Teachers*. Project will deliver training services to qualified occupationally competent individuals so they can complete the requirements of the Career and Technical Occupational Specialist I certificate. Project is collaboration with IUPUI, Ball State and ISU.

Speer, James, Geography, Geology, and Anthropology. Co-PI: Hansen-Speer, Karla. *U.S. Department of the Interior, \$5,000. Proposal to Dendrochronologically Investigate the Bridger Antelope Trap and the Surrounding Environment*. Funding for additional sampling at the Bridger Antelope Trap area in southwest Wyoming.

Speer, James, Geography, Geology, and Anthropology. National Science Foundation, \$6,055. *A Professional Development Workshop in Dendrochronology: North American Dendroecological Fieldwork (NADEF)*. Continuation funding for field week under the direction of Speer.

Sprowel*, Tradara, Center for Public Service and Community Engagement. Co-PI: Rogers, Nancy. Indiana Campus Compact, \$375. *Motiv8 to Vote Your F8!*. Funds will purchase t-shirts for student volunteers involved with campus campaign that encourages students to register to vote and to be knowledgeable voters.

Sprowel*, Tradara, Center for Public Service and Community Engagement. Co-PI: Rogers, Nancy. Indiana Campus Compact, \$500. *Alternative Spring Break*. Funding will help support students participating in Alternative Spring Activities with either Refugee Family Services in Atlanta or Metropolitan Inter-Faith Association in the Memphis area.

Stafford, C. Russell, Geography, Geology, and Anthropology. City of Jasonville, \$1,200. *Phase I Archaeological Reconnaissance, Jasonville Sewage Facility Improvements, Greene County, Indiana*. A Phase I archaeological reconnaissance and records search will be conducted on a 1 acre tract to be annexed within the Jasonville, IN, sewage treatment facility.

Stafford, C. Russell, Geography, Geology, and Anthropology. Gohmann Asphalt and Construction, Inc., \$1,500. *Archaeological Records Review and Phase Ia Reconnaissance, Gohmann Excess Materials Disposal Area On North First Street, Terre Haute, Vigo County, Indiana*. An archaeological records review and Phase Ia Reconnaissance, Gohmann Excess Materials Disposal Area on North First Street, Terre Haute, Vigo County, Indiana.

Stafford, C. Russell, Geography, Geology, and Anthropology. Gohmann Asphalt and Construction, Inc., \$1,250. *Archaeological Records Review and Recommendations, Gohmann Excess Materials Disposal Area on International Paper Mill Property, Vigo County, Indiana*. Archaeological Records Review and Recommendations, Gohmann Excess Materials Disposal Area on International Paper Mill Property, Vigo County, Indiana.

Stemmans, Catherine, Athletic Training. Andover Coated Products, \$794. *PowerFlex Cohesive Elastic Bandage Teaching Supplies*. Company donated 15 cases of PowerFlex Cohesive Elastic Bandage, 30 Power-Flex Taping system CD-ROMs, and 20 Literature Folders for the express purpose of teaching supplies.

Underwood, Dawn, Office of Sponsored Programs. Vincennes University, \$3,000. *Institutional Review Board Services Contract*. ISU will provide IRB services to Vincennes University.

*Students

Underwood, Dawn, Office of Sponsored Programs. U.S. Nuclear Regulatory Commission, \$1,644. *Contracting with Universities: Dallas Conference*. Director of Sponsored Programs will make a presentation entitled "Contracting with Universities" at a conference hosted by the Nuclear Regulatory Commission and the U.S. Dept. of Commerce.

Vandenberg, Melissa, Art. Indiana Arts Commission/Arts Illiana, \$7,773. *Visiting Artist and Scholar Series 2008/09*. The 2008/09 Visiting Artist and Scholar Series will provide an array of outstanding exhibitions of art accompanied by lectures and workshops by professional contemporary artists and scholars.

Waite, Gabi, Terre Haute Center for Medical Education. Indiana University, \$2,392. *Modulation of Immune Response through Low Frequency Electromagnetic Field (LF EMF) Exposure*. Funding costs for Dr. Waite to travel to the University of Heidelberg, where she will be a consultant on electromagnetic research.

Whitaker, John O., Jr., Biology. Co-PI: Walters, Brianne. Ecosystem Management Inc., \$23,907. *Survey of bats near Hoopston, Vermillion County, Illinois*. Bat Center to complete bat survey in Vermillion County, Illinois.

Whitaker, John O., Jr., Biology. Co-PI: Walters, Brianne. Bernardin, Lochmueller, and Associates, Inc., \$3,313. *Survey for bats under SR 54 Bridge over Coulson Drain*. Bat population study under the SR54 Bridge over Coulson Dam in Sullivan County, IN.

Whitaker, John O., Jr., Biology. Co-PI: Walters, Brianne. Fox Consultants, \$2,500. *Survey for the federally endangered Indiana bat (*Myotis sodalis*) near US 31 and Kokomo Creek in Howard County, Indiana*. Survey for federally endangered Indiana bat (*Myotis sodalis*) near US 31 and Kokomo Creek in Howard County, Indiana.

Whitaker, John O., Jr., Biology. Co-PI: Walters, Brianne. Indiana Department of Natural Resources, \$49,390. *Overwinter weight loss in bats, with emphasis on Indiana bats*. Project will obtain information on weights of bats, particularly prior to, during, and after hibernation.

Whitaker, John O., Jr., Biology. Co-PI: Walters, Brianne. Environmental Solutions and Innovations, Inc., \$3,000. *Survey for bats at the AEP Conesville Generating Station, Coshocton, Ohio*. The principal objectives of this project are to accumulate information on the bat community found near the AEP Conesville Generating Station in Coshocton, Ohio, and specifically to determine which species occur there.

Whitaker, John O., Jr., Biology. Bat Conservation International, \$3,000. *Importance of insect chitin as an energy source for bats*. Research will test the level of chitinase producing bacteria in various species of bats. Current study will compare the bacteria levels in bats from different geographical locations and its relationship to hibernation survival rates.

Whitaker, John O., Jr., Biology. Co-PI: Walters, Brianne. Gradex, Inc., \$200. *Survey Plans for the federally endangered Indiana bat (*Myotis sodalis*) along the 641 bypass in Terre Haute, Indiana*. Continuation of site survey at 641 bypass.

Whitaker, John O., Jr., Biology. Co-PI: Sparks, Dale. U.S. Geological Survey, \$33,753. *Colony Dynamics of the Endangered Indiana Myotis (*Myotis sodalis*) Using and Comparing Standard field Techniques and Molecular Techniques*. Extension to research being conducted on colonies of the Indiana bat living in central Indiana.

Williams*, Benjamin, Biology. Co-PI: Angilletta, Michael. Indiana Academy of Science, \$2,554. *Environmental Stochasticity and Developmental Responses: Expression of Heat-shock Proteins by Fruit Flies During Unpredictable Thermal Conditions*. Masters student will work with fruit flies to study the effect of environmental temperature variation on the dual control system of ectotherms which enables them to acclimate to stressful temperatures.

Williams*, Kent, Biology. Co-PI: Albig, Allan. Indiana Academy of Science, \$2,940. *In Vivo Analysis of Potentially Pro-angiogenic Factors*. Williams' research utilizes in vivo study of proteins implicated in angiogenesis, which is a contributing factor to the lethality of cancer.

Williams, Richard B., Dean's Office (NHHS). Co-PI: Anderson, Louise. Indiana University, \$335,203. *West Central Indiana Area Health Education Center*. Funds will support various health related programs in west central Indiana during the '09 academic year.

Worrall, Rita, Student Academic Services Center. U.S. Department of Education, \$321,098. *Student Support Services*. This is the fourth year of a four year funding period. Student Support Services are available to all students who need a little extra help to ensure they succeed at ISU.

*Students

Office of Sponsored Programs Staff

Dawn Underwood

Director, Office of Sponsored Programs
and IRB Administrator

Lea Hollowell

Research Coordinator

Elizabeth Metzger

Senior Research Associate

Sondra Wilkison

Sponsored Programs Coordinator

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Lori Ashcraft

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