

FUNDING NEWS & NOTES RECOGNITION ISSUE

Vol. XXIII

*James Madison University's
Office of Sponsored Programs*

August 2009

In this issue:

Funding History	1
Sponsor Highlights	2
College & Division Funding	2
Faculty & Staff Accomplishments	3
Compliance Help	9
IRB & IACUC Stats	10

FY09 Quick Facts:

- 221 awards
- 332 submissions
- 113 faculty and staff investigators
- 67% success rate
- US Department of Education largest Funding Sponsor
- \$23,144,485 in Awards

"The advancement and diffusion of knowledge is the only guardian of true liberty."
~James Madison

JMU INVESTIGATORS SECURE FUNDING EXCEEDING \$23 MILLION

Fiscal year 2009 (FY09) proved to be a lean year for James Madison University (JMU) in terms of externally sponsored activities. JMU faculty, staff, and students submitted a total of 332 proposals for external funding. Of these submissions, 221 projects were selected for funding bringing in a total of \$23,144,485 in external funding during the period July 1, 2008 through June 30, 2009.

In spite of the challenging economic climate, over 113 faculty, staff and students were involved with successfully funded projects in FY09, attaining a 67% funding success rate. The charts at right and below depict sustained efforts to augment meager internal resources for scholarly and creative endeavors and for provision of programs of distinction.

The decline of sponsored programs funding in FY09 mirrors the ailing economy in the state and nation during this period

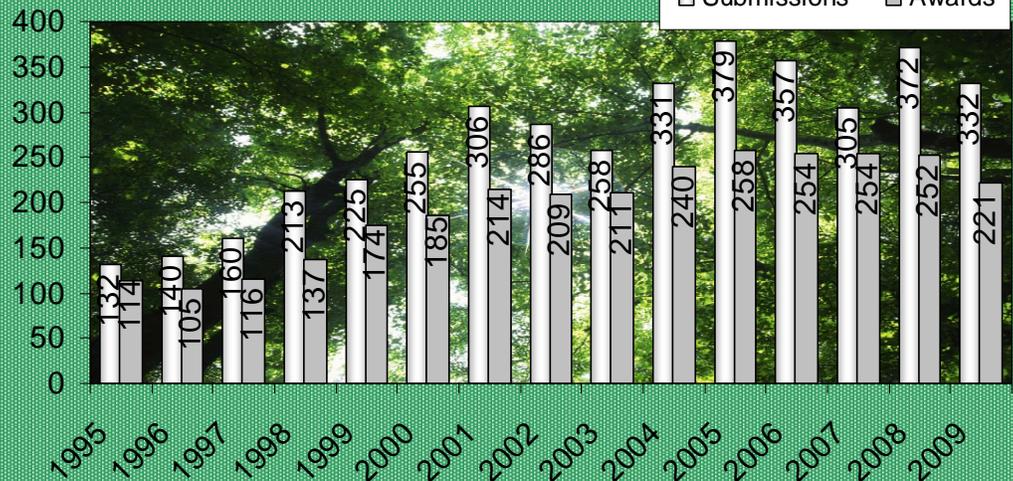
of recession. As a barometer of the economy, awards from Private/Non-Profits, Universities, and Foundations plunged by up to 50% this year. In spite of the sagging economy, innovative faculty and staff remained

vigilant in the pursuit of external funding, leveraging collaborations with other universities, industrial partners, and across disciplines. See Page 3 for abstracts of how their efforts paid off ♦

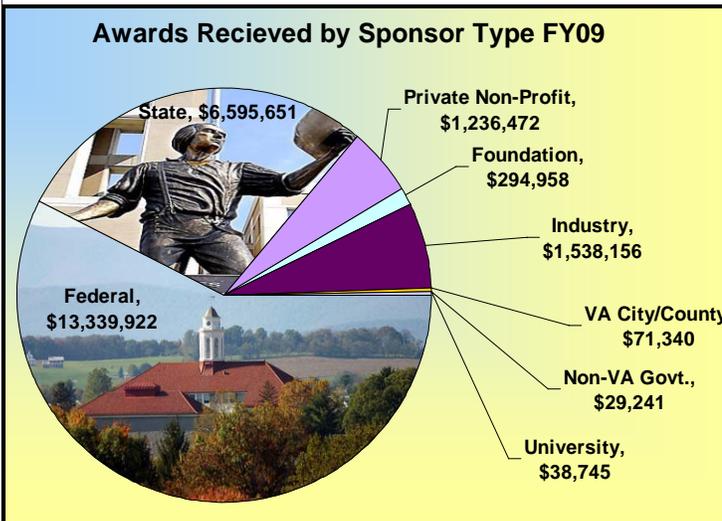
5 Year External Funding History



Proposals Submitted Vs. Awards by Fiscal Year FY95-FY09



EXTERNAL FUNDING BY AGENCY TYPE



The pie chart above breaks out funding across the various sectors of sponsors that support JMU's excellence in research, education, training, and service along with the total amount awarded. The individual sectors include federal, state, private/

non-profit, foundation, city/county, industry, VA city/county, non-Virginia government, and university.

The majority of awards both in number and total award amount came from the federal government both in direct assistance

and via federal flow-through to the State of Virginia. The U.S. Department of Education remains the single largest federal sponsor in terms of total funding dollars, funding 15 projects and contributing \$3,728,079, or 27.9% of federal funding and 16.1% of all external funding.

In FY09, state agencies funded 23 projects. It is important to note that state agencies also flowed significant federal funding to the university; this funding is captured in the federal funding totals since the origin was federal in source. State funding continues to be a significant funding source of external funding for the university, and represents 28.5% of all awards. Continuing trends of recent years, the Virginia Department of Education and the Virginia Department of Health comprised the largest percentage of total state contributions. Combined, federal and state funds

represented 86% of the overall total.

The private sector funded just 39 projects compared to 59 the prior year. In tandem with the overall economic decline, the total funding from this sector dropped precipitously from \$2,475,103 in FY08 to \$1,236,472 in FY09, a 50% reduction in one year's time. Funding from private sources represented just 5.34% of overall funding in FY09 compared to 11% in FY08. Foundation sponsor support also softened again in FY09, decreasing levels by 32% in one year. Though overall Foundation awards are austere in the present economy, they do include the continued solid support of The Jeffress Memorial Trust for support of eight new and renewal projects in the disciplines of chemistry, physics, and biology and a total of \$133,000. ♦

SPONSORED PROGRAMS AUGMENT INTERNAL RESOURCES ACROSS ALL COLLEGES AND DIVISIONS

In FY09, the ten colleges and other divisions at JMU brought in \$23,144,485 in sponsored programs. The combined efforts of 113 faculty and staff received 221 awards, achieving an impressive success rate of 67%. Records also indicate an increase in collaborative efforts on a multi-disciplinary level and inter-institutionally.

Awards varied in type, including research, public service/outreach, continuing education and instruction development, as well as equipment acquisition. Not surprisingly, a large sector of activity at the university relates directly to Research, at 24.75% of all funded projects.

In fifteen years, JMU has dramatically increased its sponsored funding by 663%. In FY95, faculty and staff brought in \$3,033,568 in external funding to augment their scholarly and creative endeavors. Just

five years later in FY00, external funding had more than tripled with the total amount of \$11,317,654. Within another five years, the faculty and staff in FY05 once again nearly doubled JMU's sponsored programs earnings to total \$21,243,497. Sponsored programs funding subsequently increased in FY06-07 then leveled in FY08 and dropped off during FY09 to end the fifteen-year period. Since FY95, JMU faculty and staff have submitted 4,051 funding applications and won 2,944 awards, earning \$232,771,664 towards research growth, education development, and public service operations.

The College of Integrated Science & Technology continued to lead all divisions in terms of total projects funded and overall funding received. The newly created division of Science, Technology, Engineering and

Mathematics (STEM) had a significant amount of funding in its initial year. "All Other Divisions," which includes Admini-

stration & Finance and Student Affairs contributed 25.16% of the total external funding received during FY09. ♦

College or Division	Total Funding	Percentage of Total
College of Arts & Letters	\$759,675	3.28%
College of Business	\$737,523	3.19%
College of Education	\$778,115	3.36%
College of Integrated Science & Technology	\$6,081,162	26.27%
College of Science & Mathematics	\$1,795,630	7.76%
Academic Affairs	\$286,046	1.24%
Research & Public Service	\$3,222,305	13.92%
The Graduate School	\$1,539,056	6.65%
College of Visual & Performing Arts	\$12,800	.40%
STEM	\$2,201,311	9.51%
All Other Divisions	\$5,730,862	24.76%

EXTERNAL FUNDING SUCCESSES—FY2009

Ms. Emily K. Akerson, and Mr. Christopher B. Nye, Institute for Innovation in Health and Human Services, received **\$50,000** from the Virginia Department of Social Services to prevent child abuse and neglect by promoting positive parenting, maternal and child health, and optimal early development; **\$35,000** from the Virginia Department of Social Services to provide in-home parenting education and support services to parents who need individualized and comprehensive support; **\$7,710** from the Valley Program for Aging Services, Inc. to provide educational and administrative services; and **\$5,000** from the Page County Department of Social Services to promote positive parenting, health, and child development.

Dr. Christopher G. Bachmann and Dr. Jeffrey D. Tang, Integrated Science and Technology, and **Dr. Robert J. Prins**, School of Engineering received **\$19,550** from the National Park Service through the Rochester Institute of Technology to convert a pickup truck to an electric motor and collect and analyze data about the usage of the vehicle.



Dr. George H. Baker, Institute for Infrastructure and Information Assurance, received **\$50,000** from Instant Access Networks to provide guidance on effective EMP/RFW protection concepts and design elements.

Dr. Alex Bannigan, Biology, received **\$18,000** from The Jeffress Memorial Trust to research the molecular mechanisms of mitosis in plants and how they differ from animals.

Col. Dennis C. Barlow, Mine Action Information Center, received a total of **\$959,618** from the U.S. Department of State to gather and distribute information, encourage and stimulate the support of programs undertaken by the Office of Weapons Removal and Abatement, implement a workshop dedicated to expanding Columbia's mine clearance capacity; and to collect and analyze data on the extent and nature of landmine deterioration; **\$65,000** from the U.S. Department of Defense to further facilitate the technology section in the Journal of Mine Action; **\$28,741** from the Geneva International Centre for Humanitarian Demining to maintain the mine action standards website; and **\$1,500** from RONCO Consulting Corporation to design a pamphlet.

Dr. Marta K. Bechtel, Biology, received **\$20,000** from the Jeffress Memorial Trust to investigate a potential role for lacritin in

keratocyte cell proliferation and wound healing.

Dr. Thomas R. Benzing, Integrated Science and Technology, received **\$65,000** from the Virginia Department of Conservation & Recreation to assist with the development of implementation plans for non point source pollution related to total maximum daily loads through Virginia's Water Quality Monitoring Information and Restoration Act; and **\$16,008** from DuPont to support a student intern assisting with field studies.

Dr. Cheryl L. Beverly, Exceptional Education, received **\$20,941** from the Virginia Department of Education to facilitate general membership meetings and a general membership and early childhood special education providers conference; **\$4,320** from the Virginia Department of Education to support efforts in planning and implementation of strategies for restructuring of JMU's Early Childhood Special Education 5-year initial licensure preparation program; and **\$119,759** from the U.S. Department of Education to offer integrated training and practice opportunities that will enhance the competencies of beginning special education teachers for providing effective services and instruction in academic subjects to children with high incidence disabilities in K-12 classrooms.

Dr. Timothy A. Bloss, Biology, received **\$25,000** from the Jeffress Memorial Trust to characterize the roles of ICD-1 and -2 in repression of apoptosis, and how this repression is released in cells fated to die.

Dr. David F. Brakke, College of Science and Mathematics, **Dr. Christine L. May**, Geology and Environmental Science, and **Dr. Jon E. Kastendiek**, Biology received **\$50,000** from the National Fish and Wildlife Foundation to make substantial improvements in the brook trout resources in the eastern U.S. by converting riparian and upland pastures to bottomland and upland forests.



Dr. David F. Brakke, College of Science and Mathematics, received **\$50,000** from the USDA Forest Service to conduct large-scale ecological studies on aquatic ecosystems in the eastern United States.

Ms. Melanie R. Brimhall, Madison Art Collection, received **\$6,000** from the Virginia Foundation for the Humanities to provide opportunities for the JMU, Harrison-

burg City, and Rockingham County communities, and public schools within our service area to discover and enjoy the art and culture of Native Americans.

Dr. Florian P. Buchholz and Dr. David H. Bernstein, Computer Science, received **\$141,583** from the U.S. Department of Justice to develop a file carving framework for computer forensics.

Dr. Harold M. Butner, Physics & Astronomy, received **\$103,210** from the National Aeronautics and Space Administration to contribute to the DEBRIS survey with analysis of the Herschel data, to provide modeling, and to follow-up new sources with ground-based observations.

Dr. Timothy J. Carter, Sociology and Anthropology, received a total of **\$25,949** through the University of Virginia to design statistical indicators of illegal immigration related behavior and attitudes as they relate to crime, and to monitor them on a continuous basis as well as their impact on victimization and police services in Prince William County.

Major C. Scott Coverstone, Police and Safety, received **\$34,185** from the Harrisonburg Police Department to enhance police enforcement through mobile cop technology in police vehicles.

Ms. Penelope Critzer, Institute for Innovation in Health and Human Services, received **\$288,884** from the Virginia Department of Health to assure the accessibility of developmental services to children in order to promote their optimal physical, cognitive, social, and emotional development and well-being; **\$92,678** from the Virginia Department of Education to support the education programs of the Child Development Clinic; and **\$40,000** from the Virginia Department of Health to assure the availability and accessibility of developmental services to children of the Commonwealth of Virginia, in order to promote their optimal physical, cognitive, social, mental, and emotional development and well being.

Dr. Pauline K. Cushman and Dr. Joseph D. Eney, Integrated Science and Technology, received **\$10,000** from the Virginia Geographic Alliance to teach about the five physical regions of Virginia; and with **Ms. Carole L. Nash**, Geographic Science Program, received **\$2,529** from the Wintergreen Nature Foundation to create excel databases for artifacts, documentation, and photographs from all sites of the archaeo-

logical study and to select artifacts from collections for exhibits and programs.

Dr. Rory A. DePaolis, Communication Sciences and Disorders, received **\$32,745** from the University of York, United Kingdom, to explore the differences in infant-directed speech between American and British-English infants.

Dr. Thomas C. DeVore, Chemistry, received **\$9,500** from the Academy of Applied Sciences to conduct the Virginia Junior Science and Humanities Symposia program.

Dr. Daniel M. Downey and **Dr. Gina MacDonald Handal**, Chemistry, received continuation funding of **\$102,526** from the National Science Foundation to provide undergraduate research experiences including opportunities in the sub-disciplines including analytical, biochemistry, synthesis, natural products, and spectroscopy; **\$10,000** from the Virginia Department of Game and Inland Fisheries to conduct a one-year study of the prevalent physical and chemical conditions influencing Lake Shenandoah; and **\$8,000** from the USDA Forest Service to continue to inventory water quality of forest streams and monitor the effects on stream water chemistry.

Dr. Carol C. Dudding and **Dr. Vicki A. Reed**, Communication Sciences and Disorders, received continuation funding of **\$375,000** from the Virginia Department of Education to provide an American-Speech-Language-Hearing Association accredited masters program in Speech-Language Pathology; and **\$18,654** from the Virginia Department of Education to assess the feasibility of telepractice in speech language pathology to address the shortage of qualified personnel in Virginia's public schools.



Mr. Thomas E. DuVal and **Ms. Susan F. Lamb**, WMRA, received **\$8,000** from the NCO to tell unique and personal stories about how public broadcasting serves as a source for information, entertainment, and empowerment.

Dr. Steven W. Evans, Institute for Innovation in Health and Human Services, received **\$450,000** from the Institute of Education Sciences to develop and evaluate an intervention package that will successfully reduce the fundamental challenges experienced by secondary-age students with severe behavior disorders; **\$194,019** from the National Institutes of Health to develop and

conduct a preliminary evaluation of a set of psychosocial interventions for adolescents with attention-deficit/hyperactivity disorder (ADHD); and **\$21,929** from the James Madison University Foundation to fund the Alvin V. Baird Attention and Learning Disabilities Center.

Dr. Diane L. Foucar-Szocki, Learning, Technology, and Leadership Education, received **\$400,000** from the Virginia Department of Education to serve students and their families after school, evenings and during summer recess; targeting populations of ESL students and low-literacy and numeracy native speakers currently served in the school day program at Waterman, Keister, and Stone Spring Elementary schools and Thomas Harrison Middle school; and **\$150,000** from the Virginia Department of Education to increase English language access and attainment, thus increasing the skilled workforce in the Shenandoah Valley.

Dr. Joanne V. Gabbin, Furious Flower Poetry Center, received **\$8,000** from the Virginia Foundation for the Humanities to pilot a seminar that will encourage and support Virginia's high school English teachers and university faculty members who want to improve their teaching skills.

Ms. Kristin M. Gardner, Office of Health Promotion, received **\$6,000** from the Virginia Department of Health to establish a policy that supports smoking cessation and cessation services through the use of normative non smoking advertising for the JMU community.

Dr. Clarence R. Geier, Sociology and Anthropology, received **\$76,658** from Carmeuse Lime & Stone to conduct cultural resource investigations on archaeological sites on the northern reserve parcel southwest of Midletown, Virginia; and **\$46,846** from the Carmeuse Lime & Stone to address the archaeological recovery, interpretation, analysis, and report preparation phases for two historically-significant archaeological sites that will be impacted by planned quarry construction.

Ms. Valarie Ghant, Multicultural/International Student Services, received **\$2,500** from the North Carolina Campus-Compact to promote diversity and unity on campus through fun, creative, and educational programs as well as through community service projects in relation to the celebration of Martin Luther King, Jr. Day.

Dr. Tammy D. Gilligan, Graduate Psychology, received a total of **\$31,500** from local and regional school systems to provide psychol-

ogy interns.

Dr. Joann H. Grayson, Psychology, received **\$44,750** from the Virginia Department of Social Services to continue to publish the Virginia Child Protection newsletter.

Dr. Dan C. Halling, Communication Sciences and Disorders, received **\$12,000** from the Virginia School for the Deaf and Blind to provide a graduate assistant on the the VSDB campus.

Ms. Kimberlee Hartzler-Weakley, Institute for Innovation in Health and Human Services, received **\$37,300** from the Virginia Department of Education to provide supplemental educational services to the children of migrant farm workers in collaboration with local school districts and to assess language and educational experience and progress of individual students.

Ms. Elizabeth Haworth, Furious Flower Poetry Center, received **\$1,500** from the Arts Council of the Valley to provide the community with the opportunity to experience music of an important period in American history performed by one of the original participants, Rutha Harris.

Dr. John T. Haynes and **Dr. Steven J. Whitmeyer**, Geology and Environmental Science, received **\$14,893** from the U.S. Geological Survey to map the north half of the Williamsville 7.5' quadrangle in the Ridge and Valley province of Virginia between the Shenandoah and Bull Pasture Mountains.

Dr. Noel Hendrickson, Institute for National Security Analysis, received **\$549,644** from the Defense Intelligence Agency to partner with the DIA to become a long-term educational asset for the intelligence community by providing an education based on cutting-edge academic research to help create a new generation of intelligence analysts.

Dr. M. Hossain Heydari, Computer Science, received **\$73,342** from the Department of Defense to obtain a scholarship in order to increase the number of qualified students entering the field of information technology for war fighting and security infrastructure.

Ms. Linda L. Holman, School of Theater and Dance, received **\$2,650** from the Arts Council of the Valley to provide high-quality affordable theater to children and families in the Shenandoah Valley.

Ms. Jane Hubbell and **Mr. Gary S. Race**, Institute for Innovation in Health and Human Services, received a total of **\$984,290** from the Virginia Department of Health to assure

the provision of comprehensive, essential health and support services for individuals and families with HIV infection; continuation funding of **\$269,031**, with **Ms. Kimberlee Hartzler-Weakley**, IHHS, from the U.S. Department of Health and Human Services to reduce the number of teens participating in premarital sexual activities; **\$207,375** from the Virginia Department of Education to provide supplemental educational services to the children of migrant farm workers in collaboration with local school districts; **\$81,405** from the Virginia Department of Health to implement, enhance, and evaluate comprehensive community based youth suicide prevention/early intervention programming; **\$61,000** from The Claude Moore Charitable Foundation to provide families of children with disabilities an opportunity to take a break from the demands of constant caregiving; **\$44,200** from the Virginia Department of Health to provide primary medical care, medications, dental care, case management, transportation, nutritional supplements/food, substance abuse, and mental health services; a total of **\$63,335** from the Department of Mental Health, Mental Retardation and Substance Abuse to provide service coordination and special instruction services in the Infant & Toddler Connection of Shenandoah Valley (ITCSV); **\$31,500** from the Central Shenandoah Health District to decrease non-marital birth rates in local communities; a total of **\$50,241** from individual donors and local Early Education Centers to provide weekly activities of the Gus Bus to encourage early learning and literacy; **\$12,920** from the Community Resource Center to provide payroll services for center staff; **\$5,722** from Crossroads to Brain Injury Recovery, Inc. to provide services to individuals affected by brain injuries; **\$5,000** from the Virginia Department of Health to provide primary medical care, medications, dental care, case management, transportation, nutritional supplements/food, substance abuse, and mental health services; and **\$2,500** from the Strong Families Great Youth Coalition to support Office on Children and Youth initiatives

Dr. William C. Hughes, Physics & Astronomy, and **Dr. Brian H. Augustine**, Chemistry, received **\$126,000** from the National Science Foundation in support of an REU program to encourage students to identify themselves as scientists through their participation in materials science research, close interaction with faculty and other students, and communication of their results at regional and national meetings.



Dr. Carol A. Hurney, Biology, received **\$10,000** from The Jeffress Memorial Trust to investigate embryonic segmentation and tail development in the four-toed salamander.

Dr. Robert A. Kolvoord, Center for STEM Education Outreach, received **\$1,476,668** from the National Science Foundation to develop and implement a research design for monitoring STEP implementation among the four project partners and to design and conduct an impact evaluation plan to collect data, track progress, and evaluate student outcomes.

Dr. Helmut Kraenzle and **Ms. Carole Nash**, Geographic Science Program, received **\$25,000** from the National Park Service to accomplish cultural resource work in the Shenandoah National Park and provide valuable experience for JMU students.

Ms. Susan F. Lamb, WMRA, received a total of **\$62,789** for FY09-FY10 from the Corporation for Public Broadcasting to provide community broadcast services; a total of **\$218,491** for FY09-FY10 from the Virginia Public Broadcasting Board to deliver programs and services which support preschool and adult education and to inform, educate and entertain families with program contents that deliver alternatives to commercialized television; **\$168,546** from the Corporation for Public Broadcasting to provide community broadcast services; and **\$34,286** from the Virginia Public Broadcasting Board to provide noncommercial educational, instructional, informational, or cultural audio programs for the benefit of print disabled individuals.

Dr. Reid J. Linn, The Graduate School, and **Ms. Cheryl L. Henderson**, and **Ms. Melinda B. Bright**, T-TAC, received a total of **\$1,539,056** from the Virginia Department of Education to continue to support statewide efforts and activities designed to enhance service effectiveness for personnel who serve children and youth with disabilities.

Dr. Gina MacDonald Handal, Chemistry, received **\$275,484** from the National Science Foundation to identify and describe important ion-protein interactions that are involved in nucleotide binding and the salt induced stabilization of alternate RecA conformations.

Dr. Victoria L. Mariani, Chemistry, received **\$44,722** from the Research Corporation to study the active site of NAAA to elucidate the structure-activity relationships with the goal of designing potent and selective inhibitors of this enzyme; and **\$20,000** from The Jeffress Memorial Trust to study the active site

of n-acyl ethanolamine-hydrolyzing acid amidase to elucidate the structure-activity relationships of its binding and catalytic sites, with the ultimate goal of designing potent and selective inhibitors of this enzyme.

Dr. Jason W. Martin, **Dr. C. David Pruett**, **Dr. Roger J. Thelwell**, and **Dr. James S. Sochacki**, Mathematics and Statistics, received **\$50,000** from the National Science Foundation to acquire a single 16-core server with 128GB of RAM and its associated peripherals.

Dr. Carla D. Martin, Mathematics and Statistics, received **\$5,000** from the Mathematical Association of America to offer a day of hands-on mathematics workshops for young women in grades 7-10, their teachers, and parents.

Dr. Jeanne M. Martino-McAllister, General Education, received **\$1,000** from the Prevention Research Center to determine the extent to which alcohol education, an on-line population-level alcohol prevention program, reduces student alcohol consumption and risky behaviors.

Dr. Merle E. Mast, Nursing, received **\$38,134** from the Harrisonburg Community Health Center to provide care for clients at the center.

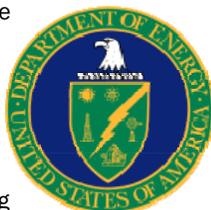
Dr. Christine L. May, Geology and Environmental Science, received **\$4,400** from the U.S. Geological Survey to quantify how the depth and composition of fill affects the emergence success of juvenile salmonids.

Dr. Lisa M. Maynard, School of Music, received a total of **\$4,150** from The National String Project Consortium to create assistantships for undergraduate string music education majors from JMU to gain hands-on teaching experiences while offering string instrument lessons to school age students from the Harrisonburg and Rockingham communities.

Dr. Robert L. McKown, Integrated Science and Technology, received **\$11,000** STTR funding from the National Institutes of Health through EyeRx, Inc. to develop an active lacritin construct as an efficacious, nontoxic topical treatment; and **\$49,891** from the National Institutes of Health through the University of Virginia to optimize lacritin's cyroprotective activity and understand its mechanism of action; and with **Dr. Kyle N. Seifert**, Biology received **\$79,776** from the Commonwealth Health Research Board for continuation funding to develop the first clinical immunoassay for human tear lacritin and pursue the

development of recombinant lacritin as a novel therapeutic for wound healing and the treatment of ocular diseases.

Dr. Jonathan J. Miles, Integrated Science and Technology, received continuation funding of **\$150,000** from the Virginia Coastal Energy Research Consortium to produce a web-based interactive mapping tool hosted at JMU that integrates relevant data developed at JMU with data from partner agencies; **\$19,500** from the Virginia Department of Mines, Minerals and Energy (DMME) to examine regulatory and jurisdictional issues, identify a permitting framework, and support continued collection of wind data at Tangier Island; **\$75,000** from the U.S. Department of Energy to support the development of wind power in Virginia-onshore, offshore, large, small, and community scale-by engaging in varying activities in a 3-year strategic plan; **\$74,404** from the U.S. Department of Energy to establish goals and objectives and provide leadership in support of curriculum development that addresses issues and technologies pertinent to wind power; **\$10,020** from the U.S. Navy to establish the economic viability of the Dam Neck Annex at Naval Air Station Oceana for the production of electricity from wind turbines; **\$10,000** from the Appalachian Regional Commission to help local officials to consider advancements in wind power technology, potential impacts and benefits from development, and challenges in both the siting and permitting process; **\$63,000** from DMME to support the newly-formed wind power applications and technologies team that serves statewide and national interests in the development of wind power both on land and offshore; and **\$7,000** from the American Wind Energy Association to help local officials to consider advancements in wind power technology.



Dr. Kevin P. Minbiole, Chemistry, received **\$10,000** in continuation funding from The Jeffress Memorial Trust to further expand the knowledge and understanding of the complex relationship of mutualistic symbionts and microbial ecology as well as to develop new strategies in amphibian conservation; and **\$1,800** from DuPont to synthesize biologically relevant natural products and related structures for testing and evaluation of properties useful for agricultural and horticultural crop protection agents.

Dr. Jonathan D. Monroe, Biology, received **\$10,000** in continuation funding from The

Jeffress Memorial Trust to determine the subcellular localization and tissue distribution of all nine arabidopsis b-amylases and to understand the role of b-amylase in starch degradation throughout plants.

Mr. Kenneth F. Newbold, Jr., Research and Public Service, received **\$1,996** from the All Hazards Consortium to provide undergraduate students with the opportunity to learn about the collaborative process and to play a part in helping the states to strategically plan and coordinate at their borders in the event of a mass evacuation; and with **Ms. Patricia E. Higgins**, Institute for Infrastructure and Information Assurance, received **\$9,624** from the Global Strategies Group (North America) Inc. to design and develop changes to the global mission systems Common Operating Picture (COP).

Dr. Gabriel Niculescu, with **Dr. Ioana Niculescu** and **Dr. Kevin Giovanetti**, Physics & Astronomy, received **\$264,063** from the National Science Foundation to collaboratively construct PCAL, a large calorimeter for the Thomas Jefferson National Accelerator Facility in the Jefferson Lab.

Dr. M. Ioana Niculescu, **Dr. Gabriel Niculescu**, and **Dr. Kevin Giovanetti**, Physics & Astronomy, received **\$111,643** from the National Science Foundation to explore hadron structure physics, specifically the transition between the perturbative and the non-perturbative regimes, quark confinement and hadronization, and measurements of fundamental quantities, such as the muon lifetime; and with **Dr. Gabriel Niculescu**, received **\$6,099** from the Fermi National Accelerator Laboratory to participate in the research and development of the Minerva detector.

Dr. John B. Noftinger, Research & Public Service, received **\$207,342** from the Shenandoah Valley Partnership to provide quality economic development support services; and **\$2,000** from the Verizon Foundation to provide sponsorship of the innovation in K-12 education at the Shenandoah Valley Technology Council Gala; and with **Mr. Kenneth F. Newbold, Jr.**, Research and Public Service, received **\$1,162,776** from I2, Inc. to provide a visual investigative analysis software license.

Mr. Christopher B. Nye, Institute for Innovation in Health and Human Services, received **\$50,000** from the Virginia Department of Health to work with the Home Visiting Consortium to identify core home visiting training and to plan for training all Virginia home visitors on core competencies; **\$61,590** from Virginia Commonwealth University to

promote health careers and access to primary care for medically underserved populations; a total of **\$254,477** from the Department of Mental Health, Mental Retardation and Substance Abuse to establish and administer a local system of early intervention services for infants and toddlers; **\$100,320** from the Virginia Department of Health to design, direct, implement, and evaluate the Virginia Wisewoman/Every Woman's Life project focusing on adding preventive health services such as nutrition and physical activity to breast and cervical cancer screening services; **\$26,599** from Virginia Commonwealth University to support CHIS & interpreting services; **\$1,111** from the First Presbyterian Church to provide medical interpretive services for Kurdish, Spanish, and Russian patients; **\$1,000** from the Asbury United Methodist Church to support the Promotoras de Salud programming; **\$71,807** from the Virginia Department of Health to expand the community health workers' community outreach contacts and resources; **\$12,500** from Rockingham Memorial Hospital to make health care more accessible to the immigrant community of Harrisonburg and Rockingham county; and **\$20,000** from the Harrisonburg-Rockingham Community Services Board to provide interpretation services to non-English speaking clients.

Dr. Cynthia R. O'Donoghue, Communication Sciences and Disorders, received **\$4,994** from the Virginia Department of Education to conduct a seminar that discusses the essential components for evaluating dysphagia in the school setting via the VDOE dysphagia best practice guidelines.

Dr. David Owusu-Ansah, History, received **\$80,040** from the U.S. Department of Education to strengthen African studies course offerings and African language instruction, enhance faculty expertise in Africana studies and promote faculty development, and increase awareness and knowledge of Africana studies at the university and in the broader community.

Dr. Maria C. Papadakis, Integrated Science and Technology, received a total of **\$38,712** from the Virginia Department of Mines, Minerals and Energy to conduct on-farm energy audits in the poultry, dairy, and greenhouse sectors in the Shenandoah Valley region; and **\$1,998** from the Shenandoah National Park to conduct a feasibility study of the potential for extensive energy auditing of structures.

Dr. Mark Parker, English, received a **\$30,000** fellowship from the Schomburg Center for



Research in Black Culture to explore the ways African American and Caribbean American women's writings attest to the richness and complexity of black women's literature in the United States.

Dr. Scott A. Paulson, Physics & Astronomy, received **\$20,000** from The Jeffress Memorial Trust to describe a set of experiments using double walled nanotubes as a test system in which both electrical properties and atomic structure of two well understood objects can be measured.

Dr. Olga Pierrakos, School of Engineering, received a CAREER grant of **\$400,000** from the National Science Foundation (NSF) to understand what students learn during undergraduate research and industry experiences and how they use and transfer complex solving problem skills in new settings; and with **Dr. Eric C. Pappas**, Integrated Science and Technology, and **Dr. Ronald Kander**, School of Engineering, and **Dr. Robin D. Anderson**, Center for Assessment & Research Studies, received a CCLI grant of **\$150,000** from the NSF to expose engineering students to a broad range of problem-based learning (PBL) environments, evaluate and assess students' learning outcomes (knowledge, skills, and attitudes), disseminate PBL practices and findings to the engineering community, and establish STEM education partners; and a BRIGE grant of **\$174,643** from the NSF to study engineering students through the lens of identity theory.



Ms. Brianna Quinn, Exceptional Education, received continuation funding through George Mason University of **\$23,720** from the Virginia Department of Education to develop and deliver courses via distance education, expand student participation, and carry out administrative responsibilities for the visual impairments consortium.

Mr. Gary S. Race, Institute for Innovation in Health and Human Services, received **\$114,551** from the Valley Aids Network (VAN) to provide educational and health administrative services; **\$45,000** from the Virginia Department of Health to provide management services and implement the Virginia Medical Interpreter Training Grants Program; and **\$24,500** from the Virginia Department of Health to provide management services and to implement the Navigating through the U.S. Health Care System

for Immigrants, Refugees, and Migrants Program.

Dr. Vicki A. Reed, Communication Sciences and Disorders, received **\$5,000** from the Blue Ridge Speech and Hearing Center of Loudoun County, Inc. (BRSHC) to continue a scholarship for a graduate speech-language pathology student in the externship semester of the masters program; and **\$45,500** from the Scottish Rite Foundation of Virginia to continue support of the JMU-Scottish Rite Language Disorders Clinic.

Mr. Henry A. Reeves, Small Business Development Center, received a total of **\$440,523** from the U.S. Small Business Administration through George Mason University to provide technical advice and guidance and to serve as a business and economic information focal point for small businesses; provide technical advice and guidance and to serve as a business and economic information focal point for small businesses; and **\$5,000** from the City of Harrisonburg to provide technical advice and to serve as a business and economic information focal point for small businesses.

Dr. Robert D. Reid, College of Business, received **\$247,000** from the Institute of Certified Professional Managers to maintain the organization's national headquarters on the JMU campus.

Dr. Terrie K. Rife and **Dr. Jonathan Monroe**, Biology, received continuation funding of **\$97,204** from the National Science Foundation to provide students with research experiences as they work one-on-one with faculty who are experienced undergraduate research mentors; expose them to ethical issues in science and give them practice in communicating scientific ideas.

Dr. Judith T. Rocchiccioli, Nursing, received **\$27,202** from the U.S. Department of Health and Human Services to support full and part time, current and future graduate students in the nurse practitioner and nurse educator tracks at JMU.

Dr. J. Barkley Rosser, Jr., Economics, received **\$36,500** from the Journal of Economic Behavior and Organization to support the JEBO organization at JMU;

Dr. James M. Shaeffer, Outreach and Engagement, received **\$19,116** from the U.S. Army to provide a strategic communications course for Army personnel; **\$16,685** from the U.S. Army to create a distance learning course in political science; and a total of

\$12,408 from the Virginia Department of Correctional Education to provide staff development and training programs.

Dr. David A. Slykhuis and **Dr. Laurie O. Cavey**, Middle, Secondary, and Mathematics Education, received **\$21,375** from the Virginia Department of Education to support the Early Childhood Special Education Academy.

Dr. Jonathan H. Spindel, College of Integrated Science and Technology, received **\$500** from the National Collegiate Inventors and Innovators Alliance to explore the use of active video gaming to treat dizziness and balance disorders through vestibular rehabilitation therapy.

Col. Nick D. Swayne, College of Education, received **\$10,000** from the Rockwell Collins Charitable Corporation to operate regional and state tournaments for the Virginia First Lego League; **\$15,000** from Verizon to increase literacy and educational achievement in Harrisonburg by supporting teachers in the Harrisonburg City Public Schools in their use of the thinkfinity.org website; **\$2,000** from Virginia First Lego to increase literacy and educational achievement in Harrisonburg; **\$1,000** from the Harrisonburg Tourism and Visitor Services to increase literacy and educational achievement in Harrisonburg; and **\$10,000** from the Dominion Foundation to operate regional and state tournaments for the Virginia First Lego League.

Dr. Anthony L. Tongen and **Dr. Charles David Pruett**, Mathematics and Statistics, received **\$19,000** from The Mathematical Association of America to offer a one-week intensive prep workshop at JMU; and with **Dr. Roger J. Thelwell**, received **\$27,030** from The Mathematical Association of America to sponsor minority students interested in participating in JMU's national research experience for undergraduates program.

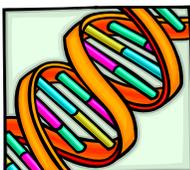
Dr. Megan E. Tracy, Sociology and Anthropology, received **\$8,070** from the National Science Foundation to conduct research on changes in conceptions of accountability and transparency due to the ongoing melamine scandal in China's dairy industry.

Dr. Leonard A. VanWyk, Mathematics and Statistics, received continuation funding of **\$51,580** from the National Science Foundation to provide student researchers with an authentic mathematical research experience and opportunities for interaction among diverse students.



Dr. C. Steven Whisnant, Physics & Astronomy, received continuation funding of **\$55,584** from the National Science Foundation to investigate the properties of the nucleon and nucleon resonances through Compton scattering and the production of mesons using polarized beams and targets.

Dr. Roshna E. Wunderlich and **Dr. Kenneth E. Roth**, Biology, received **\$87,129** for continuation funding from the Commonwealth Health Research Board to provide insight into the etiology of sports injuries through a multidisciplinary examination of the relationships among hormonal fluctuations, ligament laxity, foot load distribution and footwear to solve the problem of overuse injuries in men and women.



Dr. Steven J. Whitmeyer, Geology and Environmental Science, received **\$12,736** from the National Science Foundation to establish a methodology for embedding digital mapping data, geophysical survey results, and tectonic data from existing paper maps, in innovative 4-dimensional virtual globe models; **\$50,704** from the National Science Foundation for a CCLI project to integrate new research in 3-D and 4-D geobrowser visualizations with undergraduate education in geoscience courses that serve both general education students and geoscience majors; and **\$9,624** from the Virginia Department of Mines, Minerals and Energy to map the geology of the northeast quarter of the Stanley 7.5" quadrangle, along with pro-

viding support for JMU students engaged in research on the geology of the NE quarter of the Stanley quadrangle.

Dr. Jacqueline A. Williams, Kinesiology, received **\$36,000** from the Virginia Department of Education to provide funding for a high quality health and physical education content/teaching summer institute.

Mr. William R. Wilson, Madison Institutes, received a total of **\$178,067** from the Center for Civic Education to implement and host the seventh annual elementary We the People Institute; and a total of **\$97,478** from the Center for Civic Education to implement and host the second annual middle school We the People Institute.

Dr. James W. Wilson, Geographic Science Program, received **\$3,000** from the National Endowment for the Humanities to hold a workshop on using Internet-based technologies and standards for the visual representation of historical processes; and **\$10,000** (through the University of Richmond) from the U.S. Geological Survey to bring together experts to assess the current state of knowledge regarding land use and land cover changes and their biophysical impacts in the Shenandoah River watershed.



Dr. William C. Wood, Center for Economic Education, received **\$8,500** from the Virginia Council on Economic Education to deliver the statewide programs within the

Shenandoah Valley.

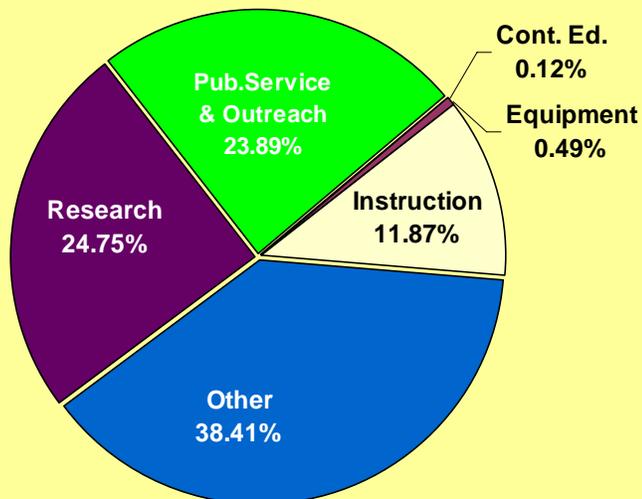
Dr. Grace A. Wyngaard, Biology, received **\$14,700** from the Fulbright Scholar Program to support collaborative research in the sciences, and to strengthen Brazilian graduate education through teaching and to contribute to broader and longer term U.S.-Brazil institutional linkages.

Dr. Rhonda M Zingraff and **Ms. Laura Brennan**, Institute for Innovation in Health and Human Services, and **Dr. Richard E. Ingram** and **Col. Dominic D. Swayne**, College of Education, received a total of **\$547,368** from the Virginia Department of Health for the purchase, development, production, hosting and release of electronic educational and resource materials to support Bright Futures guidelines for health supervision of infants, children, and adolescents.



Dr. Robert H. Zullo, Kinesiology, received **\$500** from The V Foundation for Cancer Research for students to create event management guides for the V Foundation for Cancer Research; and **\$11,589** from the Travel, Events & Management in Sports (TEAMS) for students to participate in a nationally recognized sports management conference and garner knowledge about the tournament operations, sponsorship pursuit, public relations campaign, hospitality, risk management, and ticketing functions. ♦

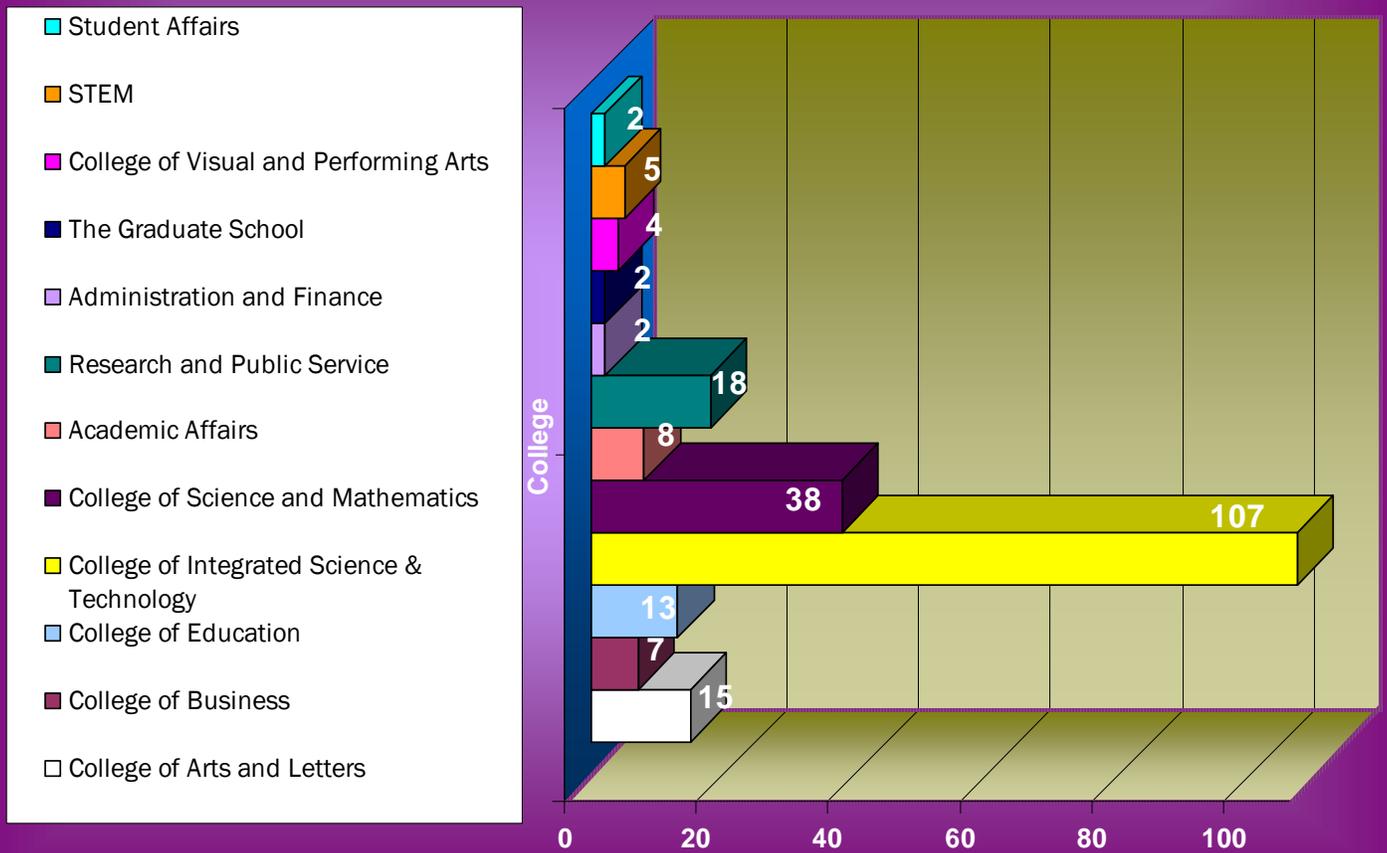
Awards by Activity Type - FY 2009



AWARDS REFLECT DIVERSE INTERESTS

Not surprisingly, a large sector of activity at the university relates directly to basic Research, at 24.75% of all funded projects. Public Service & Outreach activities are also a significant focus of externally funded projects at 23.89% of all funding received. These projects typically involve programming which extends beyond the university into the community to enrich many lives like literacy projects or medical interpretive support to local residents with limited English skills. Instruction represents 11.87% of funding while Continuing Education and Equipment Acquisition are fractions of 1% at .12% and .49% respectively. The largest sector of activity is that of Other at 38.41%. These are sponsored activities which do not correspond neatly with any of the preceding categories. Some projects which fall into this category are provision of publications or workshops put on by departments working with special interest groups. ♦

Number of Awards by College and Division



The *College of Arts and Letters* received 15 awards, increasing their awards to \$759,675, or 3.28% of total funding received. The *College of Business* investigators' funding declined to \$737,523, for 7 awards, or 3.19% of the total. *The College of Education* had 13 awards, bringing in \$778,115, or 3.36% of the total awards. *The College of Integrated Science and Technology* (CISAT) earned 107 awards, or \$6,081,162 during the year. CISAT's external awards represent 26.27% of the total funding received for the year. *The College of Science and Mathematics* received 38 awards, dropping in total funding to \$1,795,630, or 7.76% of the total amount earned in FY09. *Research and Public Service*, with 18 awards, brought in \$3,222,305, or 13.92% of all funding received. *The Graduate School*, with 2 awards, brought in \$1,539,056, or 6.65% of total funding. Investigators in the newly created division of *Science, Technology, Engineering and Mathematics (STEM)* obtained 5 awards, or \$2,201,311 and 9.51% of total funding. All other departments and divisions, which include the *College of Visual & Performing Arts, Academic Affairs, Administration & Finance, and Student Affairs* contributed \$5,743,662, which equaled 25.16% of the total external funding received during FY09. ♦

OSP Offers Compliance Resources

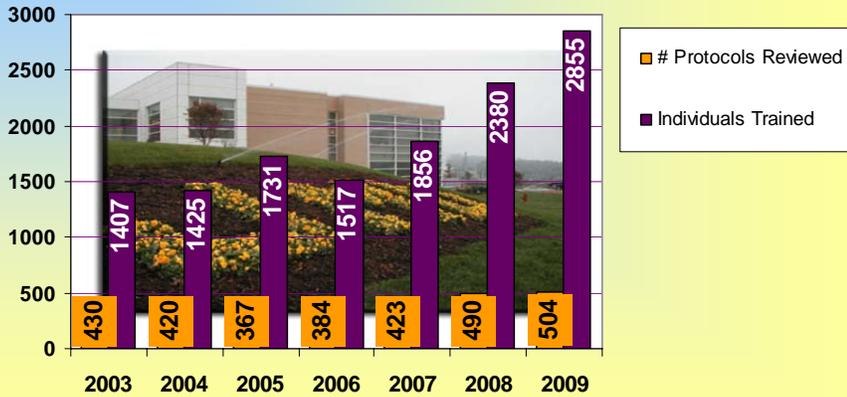
OSP is JMU's central office for review of all proposals to external funding agencies for compliance with university and agency procedures, regulations and policies. OSP ensures that all institutional proposals comply with federal, state and sponsor requirements concerning the funding and management of sponsored pro-

grams. In recent years, the complexity of regulatory oversight has dramatically increased, spanning topics as diverse as export control issues, to research involving animals and human subjects, to Biosafety and Conflict of Interest. The OSP is most heavily involved in administering the review of research protocols involv-

ing human and animal subjects at the university. Statistics concerning IRB and IACUC activity are found on the next page. More compliance information is on our website: <http://www.jmu.edu/sponsprog/resources.html>

Institutional Research Board (IRB)

7 Year Activity for Institutional Review Board

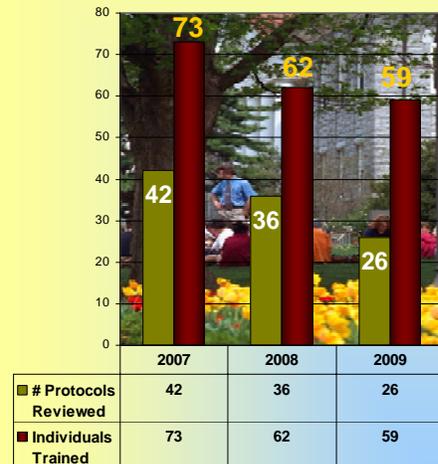


The OSP coordinates training and documentation of all Human Subjects Research activity and reporting at the university. During FY09, the OSP administered the review, editing, distribution, and approval process of 504 Human Research protocols and provided training for 2,855 investigators in the responsible and ethical conduct of human research. The chart at left shows the dramatic increase in IRB activity at the university over the past seven years. ♦

Institutional Animal Care & Use Committee (IACUC)

The OSP also coordinates all institutional animal care and use (IACUC) activity and bi-annual laboratory inspections at the university to ensure federal animal care and use regulations are observed in animal laboratories. During FY09, training was provided for 59 investigators and individuals in humane care and use of animals in research, and 26 protocols were reviewed. During the same period in FY08, 62 investigators were trained and 36 protocols were reviewed. The OSP also provides the Annual Report to the Office of Laboratory Animal Welfare (OLAW) to comply with internal and external regulatory policies. ♦

3 Year Activity for Animal Care and Use Committee



James Madison University Office of Sponsored Programs



The OSP homepage can be accessed at the following URL:
www.jmu.edu/sponsprog/
 For details on other aspects of sponsored programs, contact our office
 (540) 568-6872
jmu_grants@jmu.edu