

**NKU, OFFICE OF RESEARCH, GRANTS, AND CONTRACTS**  
**PROPOSALS SUBMITTED**  
**FISCAL YEAR 2008 (FEBRUARY)**

Department	Principal Investigator	Project Title	Funding Agency	Submission Date	Project Duration	Amount Requested
Biological Sciences	Joseph Mester	Immunomodulation by Influenza and Respiratory Syncytial Virus Virions	Kentucky Biomedical Research Infrastructure Network	02/28/2008	5/1/08 - 4/30/09	\$13,500

This research will characterize the immunomodulatory activities of Influenza A virus and HRSV Virions in specific human immune effector cells types of the mono-cytic, natural killer, and Tcell lineages. This will enhance our understanding of virus-host interactions that influence infections and help to design new vaccines with improved safety and efficacy.

Biological Sciences	Eimear Mullen	The effects of Soy Isoflavones on SREBP-regulated Gene Expression in Vivo	Kentucky Biomedical Research Infrastructure Network	02/28/2008	5/1/08 - 4/30/09	\$13,500
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Soy is known to lower cholesteraol levels and this corresponds to a decrease in cardiovascular disease risk. This research seeks to understand the mechanism of this effect and the components that contribute to this effect.

Chemistry	Stefan Paula	Hydroquinone Derivatives as Novel Calcium ATPase Inhibitors	National Institutes of Health	02/25/2008	1/1/09 - 12/31/10	\$196,650
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R15/AREA

Mono- and disubstituted hydroquinones will be evaluated as potential inhibitors of the enzyme sarco-endoplasmic reticulum ATPase. Computational techniques, enzymology, and organic synthesis will be used to achieve this task. Novel inhibitors can be valuable tools for the study of the enzyme's function and have been suggested to be of therapeutic value for cancer chemotherapy.

Developmental Math	Elizabeth McMillan-McCarthy	Learning Assistance Programs/Development	Hewlett-Packard Company	02/14/2008	7/1/08 - 6/30/09	\$77,000
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This grant will provide a Hewlett-Packard Tablet PC - Mobile Technology classroom bundle which will be coordinated with the course re-design of the prerequisite threshold algebra courses.

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Facilities Management	William Moulton	Oak Tree Addition to the Arboretum	Northern Kentucky Urban & Community Forestry Council	02/05/2008	3/1/08 - 5/31/08	\$2,433

This funding will allow for eight oak trees to be added to the NKU Arboretum. The trees will be planted on Arbor Day and will give us the opportunity to educate the NKU community about the importance of trees.

Kentucky Campus Compact	Gayle Hilleke	Ready and Response Service Team	Corporation for National and Community Service  Learn and Serve America	02/25/2008	9/30/08 - 9/29/09	\$393,972
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These funds will support year three of a consortium grant with the Louisiana Campus Compact (LACC) and the Kentucky Campus Compact (KyCC) to conduct service learning courses and projects where college students work with K-12 students to implement service projects focused on disaster preparedness and relief. The Compacts will provide training and technical assistance, oversight, marketing and communication, and evaluation.

Organizational Leadership	Melody Rawlings	Carl D. Perkins - 2007 Carry Forward Funds	U.S. Dept of Education  KY Education Cabinet, Office of Career & Tech Ed	02/07/2008	7/1/07 - 6/30/08	\$1,689
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These funds will be used to improve career and technical education programs and to supplement state and local dollars for career and technical education.

Physics and Geology	Scott Nutter	CREST: Cosmic Ray Electron Synchrotron Telescope III	National Aeronautics and Space Administration (NASA) The Pennsylvania State University	02/14/2008	12/10/07 - 12/9/10	\$25,262
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This collaboration will participate in the design and fabrication of the CREST veto paddles, continue detector and atmospheric shower simulation efforts, and support the CREST flights scheduled for spring/summer 2008 from Ft. Sumner or Palestine, and the winters of 2009 from Antarctica as needed.

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Physics and Geology	Scott Nutter	CREAM: Cosmic Ray Energetics And Mass III	National Aeronautics and Space Administration (NASA) The Pennsylvania State University	02/14/2008	12/1/07 - 11/30/10	\$50,000

These funds will allow NKU to participate in the design, fabrication, testing, and integration of plastic scintillator-based detectors.

Political Science & Criminal Justice	Julie Raines	Suspicious Behavior Threat Analysis	U.S. Department of Justice  National Institute of Justice	02/05/2008	1/15/09 - 1/14/10	\$249,920
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This research will test multiple types of suspicious behavior in real-life crowd situations to determine the effectiveness of training, possible obstacles, number of false identifications, and the average time it takes to detect a possible security threat.

Steely Library	John Schlipp	Creative Thinking: Intellectual Property for Teens and Young Adults	Cincinnati Bar Foundation	02/27/2008	4/1/08 - 3/31/09	\$10,000
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In order to raise awareness about intellectual property, such as copyright infringement and plagiarism, we propose to create a multi-channel media project. This project will provide pertinent content and a link to a short educational movie.

WNKU/Radio Station	Chuck Miller	WNKU HD Conversion	National Telecommunications & Information Administration	02/20/2008	10/1/08 - 9/30/09	\$89,863
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These funds will allow the Campus Radio Station (WNKU) to convert to HD radio technology, and to improve the station's transmission paths.

**Total Number of Proposals: 12**

**Total Funds Requested: \$1,123,789**