

**NKU, OFFICE OF RESEARCH, GRANTS, AND CONTRACTS
PROPOSALS SUBMITTED
FISCAL YEAR 2009 (DECEMBER 2008)**

Department	Principal Investigator	Project Title	Funding Agency	Submission Date	Project Duration	Amount Requested
Biological Sciences	Bethany Bowling	Evolution Education on the Farm: Demonstration and Evaluation	National Science Foundation	12/18/2008	9/1/09 - 8/31/12	\$380,851

The Evolution Education on the Farm Project seeks to utilize hands-on, inquiry-based activities on evolution in a farm setting to educate groups on several components of evolutionary theory and pre-evolutionary concepts.

Biological Sciences	Kristi Martines	Drug Delivery to the Brjain Using Novel Nanoparticles	Support of Mentors and their Students in the Neurosciences	12/01/2008	5/15/09 - 12/14/09	\$8,000
---------------------	-----------------	---	--	------------	--------------------	---------

More than one million adults are diagnosed annually with a chronic brain disease, disorder or injury. To combat these diseases, researchers have been working hard to develop potential therapies, a majority of which may only be administered by injecting them directly into the brain. The purpose of this proposal is to design nanostructures (customized dendrimers) that cross the blood brain barrier and to test their effectiveness in doing so. The impact of creating structures that can deliver a variety of drugs to the brain without damaging the blood brain barrier is tremendous, potentially affecting millions world-wide.

Computer Science	Yi Hu	Collaborative Research: Database Vulnerability Analysis: Preparing for Information Warfare	National Science Foundation	12/15/2008	9/1/09 - 8/31/12	\$284,287
------------------	-------	--	-----------------------------	------------	------------------	-----------

Information attack is a real threat to survivability of information system. The main goal of this research is to construct a probabilistic database vulnerability assessment model that is capable of generatin vulnerability profie and projected damage profile for the database system before attack happens.

Department	Principal Investigator	Project Title	Funding Agency	Submission Date	Project Duration	Amount Requested
Steely Library	Leslie Hammann	Bridging the Gap in Library Education: Supplying the Next Generation of Librarians to the Underserved Counties of Rural Kentucky	Institute of Museum and Library Services	12/12/2008	7/1/09 - 6/30/12	\$999,558

NKU will partner with Bluegrass Community Technical College in Lexington and the Kentucky Department of Libraries and Archives to address the education needs of non-degreed public library directors and staff in at-risk communities--Bridging the Gap in Library Education: Supplying the Next Generation of Librarians to the Underserved Counties of Rural Kentucky. We will recruit public library directors and staff in Western and Appalachian Kentucky to receive scholarships for the new NKU 2+2 cpmpleter program. We will also support them in this process through the development of a comprehensive state-wide mentoring program and a web-based learning community.

Teacher Education and School Leadership	Denise Dallmer	Multidimensional Leadership: The Democratic Imperative - a Six Week MEPI Student Leaders Program	Middle East Partnership Initiative MEPI Student Leaders Program NEA/PI	12/20/2008	3/1/08 - 12/31/08	\$303,893
---	----------------	--	---	------------	-------------------	-----------

Twenty students in the Midde East Partnership Initiative Student Leaders Program will engage in hands-on leadership activities to prepare them for civic responsibility in their own communities.

Total Number of Proposals: 5

Total Funds Requested: \$1,976,589