

**NKU, OFFICE OF RESEARCH, GRANTS AND CONTRACTS  
PROPOSALS AWARDED FUNDING  
FISCAL YEAR 2005 (JUNE 2005)**

Department	Principal Investigator	Project Title	Funding Agency	Award Notification Date	Project Duration	Amount of Award
Biological Sciences	Kristi Martines	Investigating Custom Dendrimer Interactions with Blood Brain Barrier Models	Kentucky NSF EPSCoR	6/17/05	5/1/05 - 4/30/06	\$ 22,479
Research Enhancement Grant						

Dendrimers are highly customizable polymers that act as basic building blocks allowing specific nanostructures to be built. Dendrimers appeal to biologists and chemists because of their precise architecture, size and shape control, high uniformity and purity, high loading capacity, high shear resistance, low toxicity and low immunogenicity. The purpose of this project is to test the use of newly-synthesized dendrimers in crossing an in-vitro model of the blood brain barrier.

Chase College of Law	Lowell Schechter	Building Educational Success for Foster Care Youth	Kentucky Bar Foundation	6/28/05	7/1/05 - 6/30/06	\$ 10,000
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This project will reproduce and distribute training materials initially prepared for foster parents in northern Kentucky to foster parents across the Commonwealth of Kentucky. It will also provide additional student fellowships to assist in training and advocacy for classes of caregivers.

Chemistry	Stefan Paula	Molecular Modeling of the Interactions between Sodium/Potassium-ATPase and its Cardiac Glycosides Inhibitors	Kentucky NSF EPSCoR	6/17/05	5/1/05 - 4/30/06	\$ 22,758
Research Enhancement Grant						

The goal of this project is to establish a research and training program in the use of modern computational approaches for the study of ligand/receptor interactions. As a model system, the interactions between the enzyme sodium/potassium ATPase and cardiac glycoside inhibitors will be investigated.

Office of the Dean of Education	Paul Wirtz	Transition to Teaching	Kentucky Department of Education	6/29/05	7/1/05 - 6/30/06	\$ 148,500
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This project will focus on identifying, training and mentoring non-certified teacher candidates employed by federally identified school districts across Kentucky. NKU will also serve as the fiscal agent for the other two institutions involved.

Department	Principal Investigator	Project Title	Funding Agency	Award Notification Date	Project Duration	Amount of Award
Physics and Geology	Wayne Bresser	Search for the Intermediate Phase in the Lithium Oxide and Aluminum Oxide Silicate Glass Systems Prepared by the Containerless and Container Method Using MDSC	Kentucky NSF EPSCoR Research Enhancement Grant	6/17/05	6/1/05 - 5/31/06	\$ 22,819

The goal of this project is to determine the existence of the rigidity transition in glasses in two compositional systems.

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**Total Number of Awards: 5**

**Total Funds Awarded: \$226,556**