

As Principal Investigator (current or in progress)

UT-Batelle Oak Ridge National Laboratory, "Uncertainty Evaluation and Documentation of ORNL Experimental Data for ICSBEP Handbook Submission" Dec-2007-Jun.2008. Lead-PI (co-PI is Dr. Ron Pevey).

University of Maryland, "Consortium on the Development of a Joint US-Russia Educational Program on Advanced Energy Technologies," Nov. 2007-Oct. 2009 (subcontract to UMD from prime contract with US Dept. of Education). Sole-PI of subcontract to UMD (Award in Negotiation).

University of Cincinnati, "BWR Assembly Optimization for Minor Actinide Recycling," Nov. 2007-Dec. 2008, subcontract established to complete parent DOE project. Sole-PI of subcontract and of parent contract. (Award in Progress).

UT-Batelle Oak Ridge National Laboratory, "Reactor Analysis of Thermal Transmutation Systems for Minor Actinides." Oct-2007-Sept.2008. Sole-PI.

As Principal Investigator (past)

The Pennsylvania State University, "Innovations in Nuclear Infrastructure and Education," Sep. 2006 – Aug. 2007, Lead PI (50% Co-PI is Dr. John Christenson).

Lawrence Livermore National Laboratory, "MCNP-based Isotopic Characterization of PWR Spent Nuclear Fuel Assemblies," March 2006 - February 2007, Sole-PI (Extension to April 2008 in progress).

UT-Batelle Oak Ridge National Laboratory, "Development of Assumptions and Criteria for the High Flux Isotope Reactor," Sep.-Dec. 2005, Sole-PI.

Department of Energy, NERI Program, "BWR Assembly Optimization for Minor Actinide Recycling," 2005-2008. Collaborating Institutions: Westinghouse BWR, ORNL, and LANL. Sole-PI.

National Science Foundation, Early Faculty CAREER Award, "Adaptive Higher-Order Error Correction of Nonlinear Diffusion Generalized Perturbation Theory via a Neural Network," August 1, 1996 – July 31, 2001, Sole PI.

IES Industries, "Adaptive Higher-Order Error Correction of Nonlinear Diffusion Generalized Perturbation Theory for Boiling Water Reactor Applications," April 1, 1997 - December 31, 1999, Sole PI.

North Carolina State University Electric Power Research Center: "Optimization of the Spatial Distribution of Enrichment and Burnable Absorbers within a BWR Fuel Assembly," January 1, 1995 - December 31, 1999, Sole PI.

ISU PROMAG Fund, Vice Provost for Research, "Support for Proposal Preparation for National Science Foundation's Alliance for Minority Participation (AMP) Program," August 1997. (Co-PI's: L. Zachary and R. Kanwar).

Iowa State University, Sponsored Programs, "Equipment Matching Fund to NSF CAREER Grant, August 1996, Sole PI.

Electricité de France, Paris-France, "Control Rod and Shutdown Margin Constraints in PWR Reload Optimization," January 1995 - May 1996 (via fully-sponsored Visiting Research Scholar – Mr. Hing-Ip Wong).

As Co-Principal Investigator

US Department of Energy, "Improvement in Capabilities for the Nuclear Engineering Department of the University of Tennessee to Support GNEP Research and Development Programs," Oct. 2007- Sep. 2008, Co-PI to Prof. Ron Pevey (PI) and Prof. Larry Miller (Co-PI).

Department of Energy, "Collaborative Project for a Program for Simulator Interfaced Light Water Reactor Instruction and Research," 2005-2007, 45% Co-PI with Prof. John Christenson (PI).

FENOC and American Electric Power Co., "Collaborative Project for a Program for Simulator Interfaced LWR Instruction and Research," Industrial Matching to DOE. 2005, 45% Co-PI with Prof. John Christenson (PI).

Department of Energy, "Building An Effective Educational Bridge Between Tuskegee University and University of Cincinnati," 2005-2007, 50% Co-PI with Prof. John Christenson (PI).

ISU Center for Teaching Excellence: Miller Faculty Fellowship, "Project LEA/RN: Leadership Development," Jul.1996 – Jun. 1997, (Co-PI with B. Lickliger, et.al.).

Iowa Department of Public Health, Bureau of Radiation Health, "Gamma Spectroscopy Measurements," July 1996. (Co-PI with Scott E. Wendt).

Special Research Initiation Grant (Fall 1995 Competition), "Development of a CO₂ Scrubber for Closed-Cycle Hazardous Waste Incineration," January 1, 1996-June 30, 1996. (Co-PI with R. C. Brown and Dean Ulrichson).

IES Utilities, Inc. - "Mutual Enhancements Between Perturbation Theory Methods and Neural Networks" January 1, 1995 – December 31, 1995. (Co-PI with E.B. Bartlett and D. B. Bullen).