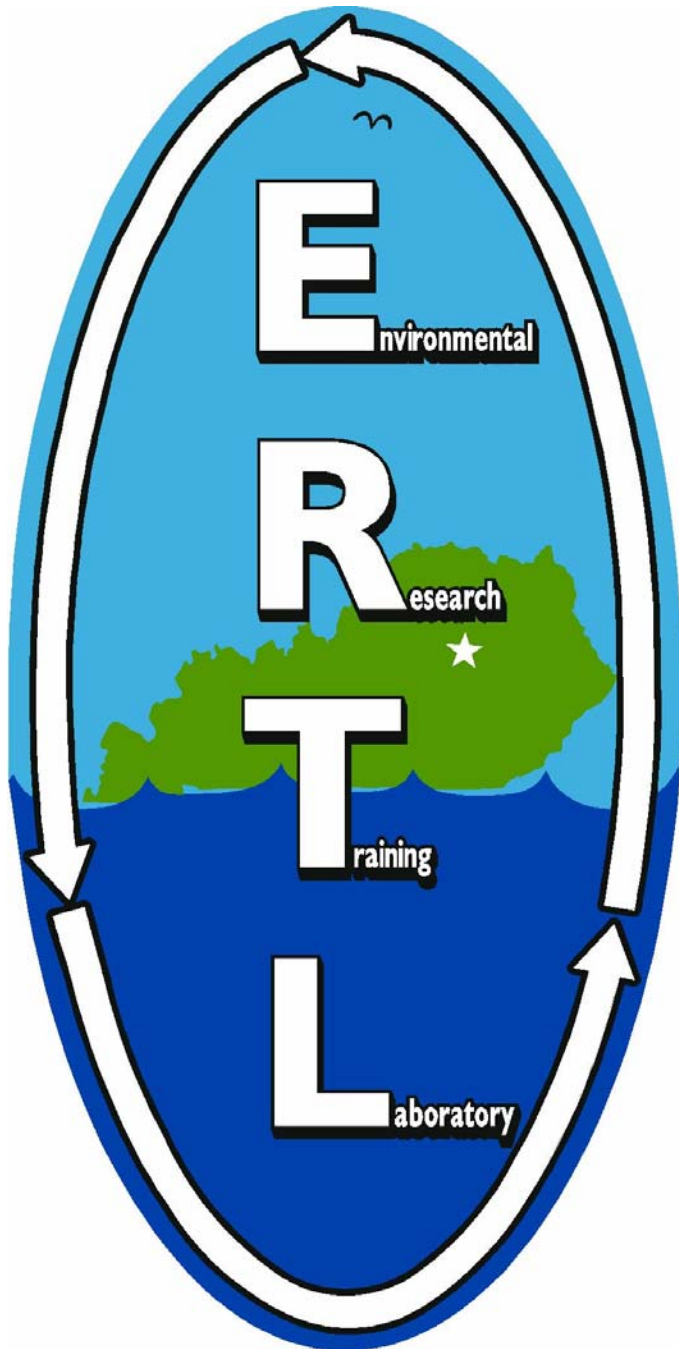


Building Kentucky's New Economy with EPSCoR

Environmental Outreach Initiative:

Building Infrastructure
Beyond the Bluegrass



Objective of UK Part of Initiative

- Facilitate research/outreach related to environmental health, engineering, and sciences across Kentucky.
 - Funds will be distributed to students through ERTL to support activities in the Jackson Purchase and the Western Kentucky Coal Field regions.
 - Builds upon current collaborations between KGS and Agricultural Extension staff.
 - Utilizes existing ERTL facilities to provide access to state-of-the-art analytical equipment, training, and coordination of supply requests and purchases.
 - Strengthens existing collaborations with older KEREC members in western Kentucky like Murray and Western.
 - Coordinates complementary activities with EKU, new KEREC member covering eastern Kentucky, and builds new intellectual infrastructure.

How it Works.

- Projects identified by KGS, AE, ERTL, TFCE, and KEREC faculty.
- Faculty mentors and students solicited through TFCE and KEREC contacts.
- Project refined and approved by ERTL Director.
- ECU contacted for potential sister projects in Eastern Kentucky.
- Students trained and provided with supplies and travel supported by grant to ERTL.

Funded Western KY Projects

PI (University)	Student (degree)	Dept.	Project	Outcomes
Brion (UK) Co-PI; LaSage (EKU)	Deb Payne (MPH)	Env. Health	Heavy Metals Concentrations in Two KY Drinking Water Reservoirs (EKU sister project)	Poster, MPH Capstone, Paper planned with EKU Preceptor
Atwood (UK)	Lisa Blue Kamruz Zaman (MS) Jerod Dougherty Chrissy Martin (BS)	Chemistry	Determination of Arsenic Concentration and Mobility in Poultry Amended Agricultural Soils from McLean County*	Poster
Fannin (Murray) Co-PI; Doss (S. Indiana)	Sandra Thompson (MS)	Chemistry	Environ. Monitoring and Assessment of Selected Inorganic Compounds in GW from Calloway County*	Poster

* Project created by joint efforts of Greg Henson, UK-Extension, McLean County, KY and Glynn Beck, Hydrogeologist, Kentucky Geological Survey, Western Kentucky Office

Other Outreach Activities

PI (University)	Student	Dept.	Project	Outcomes
Lee (UK)	Kathy Sandford, Swannie Jett, Jackie Darling CPH921	Env. Health	Environmental Studies of Aerosolized Lead at a Firing Range	Group Project, Presented at Research Day in the College of Public Health
Lee (UK)	Sheila Pressley, Dawn Jackson, Vivian Lasley- Bibbs CPH921	Env. Health	Heavy Metals in Otter Creek Runoff	Group Project, Presented at Research Day in the College of Public Health
Brion (UK)	Jared King	n/a	Bacterial Contamination on Middle School Surfaces	Middle School Science Fair Project
Brion (UK)	Anuj Padwartin	n/a	Metal Leaching Contamination Study	Middle School Science Fair Project
Brion (UK)	Andrew Miller	n/a	UV inactivation of E. coli.	Middle School Science Fair Project

Future Plans

- Use collaborations established and preliminary data collected to apply for EPA Center for Children's Environmental Health and Disease Prevention Research.
- Expand existing Environmental Health program by creating paid practicum/capstone experiences.
 - Two new faculty hired ('04, '06) (Envir./Occupational Air Quality)
 - One faculty search continues (Envir. Epidemiology)
 - Tie into Southeast Center for Agricultural Health and Injury Prevention
- Expand existing Environmental Engineering program by providing partial analytical support
 - One new faculty hired Fall 2005 (sediment transport/isotopic tracers)
- Continue to support students in ERTL for collection, analysis, and presentation/publication of their research/outreach efforts.
 - Purchase on Nanodrop for PCR viral tracer studies