



University of Tennessee GK-12 Earth Project Funded!

Geography faculty **Sally Horn** and **Ken Orvis**, together with Dr. Lynn Champion, Director of Outreach for the university's College of Arts and Sciences, received a \$1.96 million grant from the National Science Foundation to bring the excitement of research and discovery to rural middle school science classes in east Tennessee. Through their GK-12 Earth Project, ten graduate students from the Geography Department and the Earth and Planetary Sciences Department are serving as GK-12 Fellows in seven schools spread across four school districts. Each Fellow is paired with a Teacher-Partner selected from highly committed participants in past UT summer workshops in the natural sciences. The project has a strong focus on the science of climate and environmental history, and most of the Fellows are engaged in graduate research on natural archives of environmental history, including tree rings, sediments, soils, fossils of various kinds, and stable isotopes. GK-12 Earth Fellows work closely with their Teacher-Partners to develop and carry out hands-on science activities that expose rural middle school students to the Fellows' own unfolding research, to other research at the University of Tennessee, and to broader initiatives such as the Integrated Ocean Drilling Program.

Carol Harden and **Henri Grissino-Mayer** are working with Sally, Ken, and Lynn on the project, along with Earth and Planetary Science (EPS) faculty members Claudia Mora, Linda Kah, and Colin Sumrall. Kristin Rearden of the Department of Theory and Practice in Teacher Education is also involved in the project. The 2006–2007 Fellows include six graduate students from geography (**Angela Danovi**, **Sarah Deane**, **Justin Hart**, **Zack Taylor**, **Saskia van de Gevel-Edidin**, and **Chris Underwood**), and one former geography graduate student (**Daniel Lewis**, now a Ph.D. candidate in EPS).

To the right are three pictures of Geography graduate students in action as part of the GK-12 program.



[Above] GK-12 Fellows Zack Taylor and Chris Underwood at the Heritage Middle School Fall Carnival on September 22, 2006. They set up a dendrochronology and soil charcoal display and enticed carnival goers with a "Guess the Number of Tree Rings" contest. Zack and Chris were able to speak with many parents and students about current research activities at the University of Tennessee and how the GK-12 Fellows hope to incorporate aspects of this research into the middle school science.

[Below] GK-12 Fellows Angela Danovi (top left) and Saskia van de Gevel (bottom center) and Teacher-Partners Betsy Tillet and Victoria Headrick helped parents and students get excited about science at Carpenters Middle School Open House on September 18, 2006, with interactive demonstrations about tree-rings, rocks, fossils, and water quality.

