



Courtesy of University of Kansas

•

Elias MICHAELIS Pharmacology / Toxicology University of Kansas

2011 SCIENCE in KANSAS 150 years and counting

Elias MICHAELIS current

- Is both a medical doctor and a Ph.D. scientist. He studies normal brain function as well as the effects of aging, disease, drugs and chemicals on nerve cell activity.
- Has performed pioneering studies of a neurotransmitter in the brain that controls memory and learning but also causes damage associated with stroke and seizures.
- Has served as a scientific adviser to biotech and pharmaceutical companies as well as the National Institutes of Health (NIH).
- Director of the Higuchi Biosciences Center at KU.

EXTRA COOL: His research has brought in millions of dollars in grants since 1974, contributing to the KU School of Pharmacy being ranked fourth in the nation for NIH funding.

Project of the Ad Astra Kansas Initiative www.adastra-ks.org



Wichita State University

Kendra McLAUCHLAN current

- Studying global change today by looking back 10,000 years at nitrogen availability in forest and grassland ecosystems. Nitrogen (N) is essential for life and is an important part of the nutrient cycles.
- The process of nitrogen in the atmosphere being "fixed" or converted into useable form in the soil, used by plants and animals and then returned to the atmosphere through decomposition is called the nitrogen cycle.
- Will look at changes in nutrient cycles at three sites in North America to reconstruct past changes in N cycling. Using sediment cores, wood from living trees and preserved foliage, research will go back 10, 100, 1,000 and 10,000 years.
- Allow insights into the impact of human-caused changes to the global N cycle in the 20th century.

EXTRA COOL: Awarded a National Science Foundation CAREER award for this project. This is a prestigious award given to young scientists who show great promise.

Project of the Ad Astra Kansas Initiative www.adastra-ks.org

L. Scott Miller current

- Growing up on military bases, he has always been interested in flight.
 Joined WSU in 1988, after earning a PH.D. in aerospace engineering from Texas A & M. Projects have included work with Boeing and NASA Langley. He is chairman of the Department of Aerospace Engineering at WSU.
 Research interests are experimental aerodynamics, aircraft and airfoil designs, rotor aerodynamics
- aircraft and airfoil designs, rotor aerodynamics (which can mean anything from a box fan to a helicopter to a wind turbine).
- Current activities are related to Unmanned Air Vehicles (UAVs). This has led to students designing, building and testing over 30 different planes in the past 3 years as part of class projects.
- "If you can design a plane you have the foundation to design a spacecraft, too," he says.

EXTRA CODL: Serves as program director of "NASA in Kansas" which is part of a NASA network to support STEM education, research and public outreach. Project of Ad Astra Kansas Initiative www.adastra-ks.org