Kansas Sesquicentennial 2011

Credit: KU Life Span Institute

MABEL RICE

SPEECH-LANGUAGE-HEARING SCIENCES & DISORDERS
University of Kansas

Mabel Rice current

- Researches the causes, processes and treatments of language impairments in children.
- Grammar and language skills are rooted in a group of complicated brain functions.
- In 2009, Rice led a research team which was first to report that a mutation in a certain gene found in our DNA is a likely culprit in Specific Language Impairment (SLI). SLI affects about 7 percent of 5- to 6-year-olds. Children with SLI don't begin talking until ages 3 or 4 and then use simpler sentences and grammar than others their age. They often develop reading problems. This finding is important in that it shows that genes can affect language development and that other things like reading delays might be related also. This gene is also connected to dyslexia.
- The good thing to know is that early intervention can help children close the gap on language, speech and reading problems, says Dr. Rice.

EXTRA COOL: Director of KU's Child Language Doctoral Program, the first of its kind in the nation.

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Kansas Sesquicentennial 2011

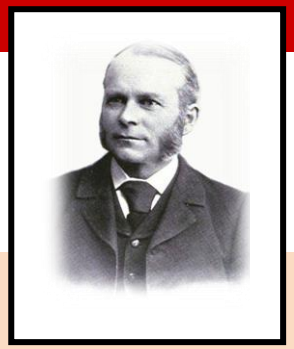

Photo courtesy of KU University Archives

FRANCIS H. SNOW

ENTOMOLOGY

University of Kansas

Francis H. Snow 1840-1908

- Elected to the first faculty of the University of Kansas as a professor of mathematics and natural science.
- Organized collecting expeditions which resulted in the KU Natural History Museum.
- His focus was entomology. Discovered over 200 species of insects.
- In 1890 he discovered a method to kill a terrible chinch bug infestation, saving corn crops in Kansas and neighboring states.
- Was the first to catalog the birds of Kansas, describing over 300 species.
- Was co-founder of the Kansas Academy of Scientists (the 2nd oldest organization of its kind in the U.S.).

EXTRA COOL: Snow Hall on the KU campus is named in his honor.

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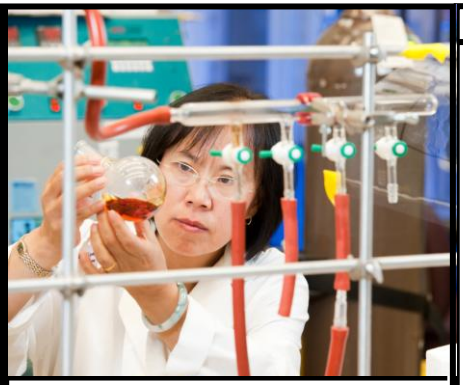

Courtesy of the KSU Photo Services

Xiuzhi "Susan" SUN

Grain Science / Industry
Kansas State University

2011 SCIENCE in KANSAS *150 years and counting*

Xiuzhi "Susan" SUN current

- Is an expert on bio-based materials. Focuses on how various plant and grain molecules can be used to make materials that are safer, more durable and environmentally friendly.
- Many glues used in construction products today are made of toxic chemicals which can be harmful because they emit noxious gasses into the air under some weather conditions. Sun has eight patents for safe natural products she has discovered, such as a soy-based water resistant adhesive. Another one gets stickier in dry environments and would be good for outer space. Her adhesives are being used to make barrels out of straw and soy adhesives to hold cattle feed. These barrels are safe for cattle to eat.
- Recently, she developed a water-based gel, called a hydrogel, which may one day be used to help repair and replace body tissue.

EXTRA COOL: Inspired as a teenager by stories of famous scientists like Sir Isaac Newton.

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Photo credit: Monarch Watch Website

Orley "Chip" TAYLOR

Insect Ecology
University of Kansas

2011 SCIENCE in KANSAS *150 years and counting*

Orley "Chip" TAYLOR current

- In 1992, founded the Monarch Watch at KU, a program focused on education and research about Monarch butterflies. Every fall, volunteers across North America tag these beautiful orange and black butterflies as they migrate.
- Monarchs, the only insect to migrate between Canada and Mexico like birds do, are important plant pollinators, especially in the U.S. Southwest. Up to 100 million migrate each year.
- This migration is considered an endangered natural phenomenon. A lot of their wintering habitat is being lost to logging in Mexico. And in the U.S. a lot of their food supplies, like milkweed, are being killed by pesticides.

EXTRA COOL: Monarch Watch created the Monarch Waystation Program, which encourages the public or schools to plant areas with milkweed and flowers that provide food and shelter for butterflies as they travel.

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