



Credit Special Collections, University of Virginia Library

Jesse BEAMS

Physics
University of Virginia

2011 **SCIENCE in KANSAS**
150 years and counting

Jesse BEAMS 1898-1977

- Born and grew up on a farm near Belle Plaine. Eamed degree in physics at what is now Wichita State University.
- Known for developing the ultra centrifuge. A centrifuge is a device that spins on an axis at high speeds and uses centrifugal force to separate liquids of different density, like a cream separator. Or to separate water like a washing machine. Or to simulate gravitational pull. Before his invention a centrifuge was capable of a few thousand spins a minute. His could do a million spins a second.
- The ultra centrifuge has many uses today in chemistry and biology as well as physics.
- Also worked with NASA conducting experiments to precisely measure gravitational force.

EXTRA COOL: Awarded the National Medal of Science Award in 1967. This is an award presented by the president of the United States to individuals who have made important contributions in the sciences.

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Credit: Hungarian Natural History Museum

Caroline CHABOO

Entomology
University of Kansas

2011 **SCIENCE in KANSAS**
150 years and counting

Caroline CHABOO current

- Entomology is the study of insects. At KU she is an expert on leaf beetles and studies their biology and evolution.
- Is studying beetles in Africa that contain a toxin so poisonous that indigenous peoples use it on arrows for hunting game.
- Also conducting studies in Nicaragua and Peru. Some beetles ruin food crops like rice or ornamental plants like orchids. Chaboo is training scientists in this field as there is a shortage of global experts studying this.
- Received a National Science Foundation grant for an online database of insect information from around the world that anyone can use.

EXTRA COOL: Her work with beetles is featured in "Building Bright Futures," a fifth-grade science text book published by MacMillan/McGraw-Hill.

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Kansas Sesquicentennial 2011



*Kansas Memory.org Kansas State Historical Society**

SAMUEL J. CRUMBINE

PUBLIC HEALTH



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Samuel J. Crumbine 1862-1954

- Born in Pennsylvania. Was a doctor in Dodge City during its wild heyday of the late 1800s.
- Appointed Secretary of Kansas State Board of Health in 1904. Became a nationally-known pioneer in the field of public health.
- Pushed for public health practices that would prevent the spread of communicable diseases like tuberculosis.
- Campaigned against common practices such as spitting on the sidewalk, public drinking cups and common towels, unscreened windows. Also, pushed for water and sewage control.
- Invented the flyswatter.

EXTRA COOL: Was a contemporary of Wyatt Earp and Bat Masterson. Thought to be the role model for Doc Adams on the long-running television show "Gunsmoke".

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Credit: NASA

Ron EVANS

Electrical Engineering
NASA

2011 **SCIENCE IN KANSAS**
150 years and counting

Ron EVANS 1933-1990

- Born in St. Francis. Graduated from Highland Park High in Topeka. Earned degree in electrical engineering from the University of Kansas in 1956.
- Was selected as an astronaut by NASA in 1966.
- Logged over 300 hours in space.
- His first and only flight into space was with Apollo 17 in 1972, the last scheduled manned mission to the moon for the U.S. As command module pilot he orbited the moon while fellow astronauts Eugene Cernan and Harrison Schmitt descended to the surface.

EXTRA COOL: One of only 24 people to have flown to the moon. Received the NASA Distinguished Service Medal in 1972.

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