

Credit: U.S. National Oceanic and Atmospheric Administration

**Robert BALLARD**  
Oceanography  
University of Rhode Island

**Robert BALLARD** current

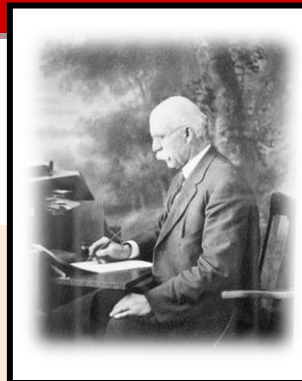
- Born in Wichita.
- Grew up in San Diego, where his love for the ocean began. Was inspired by Jules Verne's book "20,000 Leagues Under the Sea."
- Earned degrees from the Universities of Rhode Island and California at Santa Barbara.
- Served in the U.S. Navy as an oceanographer.
- Was a pioneer in use of deep-water diving submarines for exploration.
- In 1985, he and his crew found the wreck of the ship Titanic which had sunk in 1912.
- Has led over 100 deep-water expeditions.

**EXTRA COOL:** In 1989, he began the JASON Project, which allows middle schoolers to use audio and video feeds to follow expeditions.

★ ★ Project of the Ad Astra Kansas Initiative  
[www.adastra-ks.org](http://www.adastra-ks.org)

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

**Kansas Sesquicentennial 2011**



Courtesy [KansasMemory.org](http://KansasMemory.org) [Kansas Historical Society](http://KansasHistoricalSociety.org) \*

**ELAM BARTHOLOMEW**  
BOTANY

Fort Hays State University



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**Elam Bartholomew 1852-1934**

- Born in Pennsylvania. Settled near Stockton, in Rooks County, at age 22.
- Was a farmer, self-taught botanist and mycologist (studies fungi). Developed his own herbarium (collection of preserved plants and fungi).
- Known worldwide for his work on fungi, which include molds, mildews, rusts, yeasts, and mushrooms.
- Worked for the United States Department of Agriculture (USDA) researching ways to prevent or kill a fungus grain disease called rust. Also did research on corn, cotton and alfalfa for the USDA.
- Kept a daily diary for 60 over years. Considered a pioneer naturalist.

**EXTRA COOL:** The herbarium at the Sternberg Museum of Natural History at Fort Hays State University is named for him.

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**Dwight BURFORD**  
Metallurgical Engineering  
National Institute for Aviation Research (NIAR),  
Wichita

**Dwight BURFORD** current

- Metallurgical engineers study all kinds of metals, testing metal strength under many conditions and using that data to design better parts or solve manufacturing problems.
- Burford is the director of the WSU Center for Friction Stir Processing. Friction stir welding (FSW) is a process where one part is joined with another using rotating force. Unlike traditional welding, the material is softened, not melted. Compare to riveting, there is no seam and the joint is much stronger.
- Introduced the use of FSW on planes at Boeing when he worked there. Has led many aerospace industry research projects in FSW.

**EXTRA COOL:** Burford and his staff are developing the use of robots to do friction stir welds.

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Courtesy of [KU Natural History Museum](http://KU Natural History Museum) & [KU Archives](http://KU Archives)

**LEWIS L. DYCHE**  
Zoology

University of Kansas



**Lewis L. Dyche 1857-1915**

- As a youth he preferred hunting, trapping and fishing to book learning. By the time he graduated from KU, he had "grades so high you had to take out a telescope to look at them." (1889 KU yearbook)
- Named KU professor of anatomy and physiology, taxidermist, and curator of mammals and birds.
- Traveled throughout North America to collect mammals for KU, which he mounted and displayed at the 1893 Chicago World's Fair. Took part in expeditions to the Arctic with explorers Frederick Cook and Robert Peary.
- In 1909, became Kansas fish and game warden and an important conservationist.

**EXTRA COOL:** The Natural History Museum at KU is named in his honor.

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