## Online genetic database helps breeders make healthier cattle

<u>Agricultural Research Service</u> (ARS) scientists in Clay Center, Nebraska, have sequenced the whole genomes of a panel of 96 bulls—representing 19 U.S. cattle breeds—and made the data accessible online.

The result is a searchable and publicly viewable genomics resource of a broad cross section of U.S. beef cattle that will make it easier for scientists to identify genes associated with traits that are important to breeders and ranchers. The 19 breeds include Angus, Hereford, Brangus, Brahman, and Texas Longhorn.

"Our goal was to include animals that represent the breadth of diversity in U.S. beef cattle, not just the top breeds," says Michael Heaton, a microbiologist with ARS's <u>U.S. Meat and Animal Research Center</u> (USMARC).

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"Our primary interest is infectious disease and animal health," Heaton says. "Typically, diseases affect only a small percentage of animals, but the loss of any animal can be expensive. We wanted to see if we could root out those relatively rare genetic defects that cause a few animals to get sick and die. To do that, we had to gather all the genetic diversity in U.S. cattle to find those 'bad' genes."

Using the panel, Heaton and his colleagues analyzed a bovine gene associated with brisket disease. ... There is no cure for pulmonary hypertension, which also occurs in humans.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Online Cattle Genomes Reveal Disease Mutations