STATUS OF GENOME EDITING IN FOOD ANIMALS

Washington, DC – May 15, 2019, for Immediate Release –

The status of genome editing in food animals, will be the subject of a National Coalition for Food and Agricultural Research (NCFAR) seminar Monday, May 20 at 10 am in 328A Russell Senate Office Building and again at a noon luncheon in 1300 Longworth House Office Building. The presenter is Dr. Alison Van Eenennaam, Department of Animal Science, University of California, Davis.

"Genome editing represents a new technology to introduce useful sustainability traits like disease resistance, climate adaptability, animal welfare, and food quality attributes into U.S. livestock breeding programs" says Van Eenennaam.

“This presentation provides an excellent example of the value of federally funded food and agricultural research, extension, and education in producing the scientific outcomes and outreach needed to meet 21st century challenges and opportunities,” says Andy LaVigne, President of NCFAR.

Highlights: Genome editing is a technique that can be used to introduce useful genetic variations into food crops and livestock. It involves the use of enzymes that cut DNA at a specific sequence (site-specific nucleases e.g., CRISPR-Cas9), thereby introducing a break into the DNA at a targeted location. Researchers in the United States have already used editing to develop disease-resistant pigs, dairy cows without horns, and this technique could be used to precisely introduce useful genetic variation into structured livestock breeding programs. Such variation might include the repair of genetic defects, the inactivation of undesired genes, or the movement of useful genetic variants between breeds. For editing to be incorporated into livestock breeding schema, it will need to seamlessly integrate with genetic improvement program design. This will likely involve introducing edits in multiple genetically elite animals to avoid genetic bottlenecks. It will also require editing of different breeds to maintain genetic diversity, and enable structured cross-breeding. Regulatory policy for genome edited food animals is still being formulated in many countries. In the absence of regulatory harmony, it is possible that some countries will have the ability use genome editing in food animal breeding programs, whereas others will not, resulting in disparate access to this technology, and ultimately the potential for trade disruptions.


The seminar is open to the public and the media. ******

The National Coalition for Food and Agricultural Research (NCFAR) is a nonprofit, nonpartisan, consensus-based, and customer-led coalition that brings food, agriculture, nutrition, conservation, and natural resource stakeholders together with the food and agriculture research and Extension community, serving as a forum and a unified voice in support of sustaining and increasing public investment at the national level in food and agricultural research, Extension, and education. NCFAR’s Hill Seminar Series, now in its fourteenth year, regularly presents leading-edge researchers working to provide answers to pressing issues confronting the public and Congress. The Hill Seminar Series helps demonstrate the value of public investment in food and agricultural research—investment that returns 45 percent per year on average, and $20 in economic benefit from every $1 investment in food and ag research.

Go to http://www.ncfar.org/Hill_Seminar_Series.asp for more information about the seminar series and past topics. Interviews with NCFAR President Andy LaVigne are available by request. For additional information, go to www.ncfar.org; or contact Tom Van Arsdall, Executive Director, at tom@vanardsall.com or (703) 509-4746.