

IMPACT COMMUNICATIONS TOOLKIT

Improving Poultry Genetics & Production (NC1170)

April 2024

ABOUT THE IMPACT STATEMENT

SUMMARY: Poultry meat and eggs are popular, economical, nutritious sources of protein, and the poultry industry plays a major role in the U.S. economy and global food system. But diseases, heat, and other stressors cause significant losses each year. Researchers at land-grant universities are developing and using advanced technologies and data to improve poultry genetics, breeding, and production.

LINK: <https://bit.ly/poultry-genetics>

PROJECT FUNDING: This project is supported in part by USDA NIFA through Hatch Multistate Research Fund allocations to participating State Agricultural Experiment Stations at land-grant universities and partners, including: University of Arizona, University of Arkansas, University of California, Davis, California State University, Fresno, Cornell University, University of Delaware, University of Florida, University of Georgia, Iowa State University, University of Maryland, Michigan State University, University of Minnesota, Mississippi State University, North Carolina State University, Ohio State University, Oregon State University, Pennsylvania State University, University of Tennessee, Texas AgriLife Research, Virginia Tech, West Virginia University, University of Wisconsin, USDA-ARS Beltsville Agricultural Research Center, USDA-ARS/Missouri, USDA-ARS-Avian Disease & Oncology Laboratory, Western University of Health Sciences, Queen Mother Hospital for Animals, The Royal Veterinary College. Project participants may receive additional funding from other sources. This project was renewed in 2023, and may include additional participants.

PARTICIPANT INFO: bit.ly/NC1170-participants

PROJECT DETAILS: bit.ly/NC-1170

HOW CAN YOU USE THE IMPACT STATEMENT?



SEND to department heads, Experiment Station/Extension Directors, and communications staff



DISCUSS with legislators, stakeholders, potential partners, and others



PITCH to magazines, newspapers, and other traditional media outlets



INCLUDE in presentations, grant proposals, briefs, meetings, and reports



SHARE in social media posts, blogs, and newsletters



UPLOAD to websites and databases



ANY WAY YOU WANT! The Impact Statement was created to help promote your work so you may use/share it as you deem appropriate

SHARING ON SOCIAL MEDIA

Write a post. Use the sample posts below or create your own original posts to feature the project and Impact Statement on your social media channels.

Link. Include a link to the Impact Statement.

Stand out. Include photos or other simple visual aids. Provide attribution and alt text. If your institution does not have suitable images, try these free image libraries:

[USDA Flickr](#)
[USDA-ARS Image Gallery](#)
[Unsplash](#)

Connect. Add relevant hashtags and/or handles for your institution, funders, partners, and stakeholders. Consider timing your posts to connect with related events (e.g., major conferences, holidays, seasons, news).

@USDA_NIFA #NIFAimpacts
@USDAscience
@AgIsAmerica @APLU_Ag #AgIsAmerica
#landgrantuniversities
@MRFimpacts
@NCRegionalAssoc

#poultry #chicken #turkey #eggs #broilers
#genetics #genomics
@thepoultrysite
@PoultryWorld
@EggIndustryCntr
@USPOULTRY1947

March 19 | National Poultry Day
#NationalPoultryDay #PoultryDay

May | National Egg Month
#NationalEggMonth #EggMonth

May 10, 2024 | World Poultry Day
#WorldPoultryDay

June 3 | National Egg Day
#NationalEggDay #EggDay

July 15-18, 2024 | Poultry Science Association
Annual Meeting
@PoultrySci

September | National Chicken Month
#NationalChickenMonth #ChickenMonth

November 28, 2024 | Thanksgiving (turkey)
#Thanksgiving #TurkeyDay
#ThanksgivingDinner

SAMPLE POSTS

Researchers at land-grant universities are developing & using advanced technologies to improve #poultry genetics, breeding & production. These efforts are key to a strong, sustainable poultry industry that produces a steady supply of safe, nutritious meat & eggs. <https://bit.ly/poultry-genetics>

Research on the genetic mechanisms that influence disease is helping guide strategies to improve #poultry health & productivity, reducing losses for producers & providing safer, higher quality poultry products for consumers. <https://bit.ly/poultry-genetics>

As part of a multistate project, scientists conduct innovative research on #poultry genetics, organize international workshops to share findings, and train students, post-docs & visiting scholars. These efforts are advancing the field of poultry science. <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry genetics, @CFANS identified genetic markers to improve poultry resistance to aflatoxin B1, a potent carcinogen that causes annual losses estimated at over \$500 million. See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry genetics, @aglifesciences & @UDcanr generated new knowledge about “woody breast” (which causes poor texture in #chicken and #turkey breast meat). See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry genetics, @ucdavisCAES, @iastate_cals & @UDcanr identified genes associated with Newcastle virus disease response. See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry genetics, @UFCALS @UF_IFAS showed that chemical inhibition of a certain enzyme could be used to limit inflammation in chickens suffering from Salmonella. See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on poultry genetics, @bumperscollege mapped resistance to lameness caused by bacterial chondronecrosis with osteomyelitis, which is a significant animal welfare issue among commercial broiler chickens. See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry genetics, @UArizonaCALs, @cafnr & @WesternUNews characterized & annotated immune cells & receptors in the chicken genome that contribute to disease resistance. See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry, scientists at @CANRatMSU @cfans @CFAES_OSU @ucdavisCAES @iastate_cals @bumperscollege & @UGA_CollegeofAg studied the genetic mechanisms of heat & cold stress, which threaten poultry meat quality. See more impacts: <https://bit.ly/poultry-genetics>

To foster advances in #poultry breeding & production, @iastate_cals has developed & maintained a vast library of genetic material, including chicks, fertile eggs, blood, tissues, DNA & RNA for research use. See more impacts: <https://bit.ly/poultry-genetics>

To foster advances in #poultry breeding and production, researchers on a multistate project have developed new typing methods that are easier, quicker, and more reliable. See more advances: <https://bit.ly/poultry-genetics>

As part of a multistate project, @UWMadisonCALs scientists developed new statistical and machine learning algorithms for prediction of feed efficiency and leg disorder traits in broiler. See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry production, @UTIAg identified ways to manipulate hen diet to modulate fat accumulation in offspring. See more impacts: <https://bit.ly/poultry-genetics>

As part of a multistate project on #poultry genetics, @VTCals showed that delayed access to feed can negatively affect goblet cells, leading to increased risk of pathogen infection. See more impacts: <https://bit.ly/poultry-genetics>