

# IMPACT COMMUNICATIONS TOOLKIT

## Genetics of Immunity and Resistance to Avian Diseases

### ABOUT THE IMPACT STATEMENT

**SUMMARY:** Avian diseases pose a major challenge to poultry production. Working together, scientists at land-grant universities have shed light on poultry genetics and identified breeding strategies, vaccines, feed amendments, and other ways to improve poultry immunity and resistance to diseases. Their work supports a sustainable poultry industry that can meet consumer demand for safe, high-quality meat and eggs.

**LINK:** [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-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 other partners, including: University of Arkansas, Auburn University, University of California, Davis, University of Delaware, University of Georgia, University of Illinois, Iowa State University, University of Maryland, North Carolina State University, Ohio State University, West Virginia University, Western University of Health Sciences. Previous iterations of this project may include other participants and partners. Participants may receive additional funding from other sources.

**PROJECT DETAILS:** [nimss.org/projects/19036](https://nimss.org/projects/19036)

### 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](https://bit.ly/MRF-poultry-genetics).

**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  
@NERASAES #NERASAES  
#PromotingCollaboration

#poultry  
#chicken  
#eggs  
#birdflu #avianinfluenza #HPAI

March 19 | National Poultry Day  
#NationalPoultryDay

last Saturday of April | World Veterinary Day  
#WorldVetDay #WorldVeterinaryDay

May | National Egg Month  
#NationalEggMonth

June 3 | National Egg Day  
#NationalEggDay

September | National Chicken Month  
#NationalChickenMonth

### SAMPLE POSTS

Avian diseases pose a major challenge to poultry production. Scientists at land-grant universities have shed light on #poultry genetics & identified breeding strategies, vaccines, feed amendments & other ways to improve poultry immunity & resistance to diseases: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)  
@USDA\_NIFA @AgIsAmerica

Managing avian diseases is complex. See how a multistate project brings together researchers from different disciplines and states to conduct efficient, innovative research on #poultry genetics, immunity & disease resistance: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics) @NERASAES #NERASAES #PromotingCollaboration

As part of a multistate project on avian diseases, scientists developed #poultry breeding lines with defined genetic characteristics, enabling research on immune response and disease resistance. See more project impacts: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)

Using tools like CRISPR/Cas9, scientists have identified specific disease-resistance genes in poultry. This helps #poultry breeders & producers enhance the frequencies of favorable genes in their populations. See more project impacts: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)

Members of a multistate research project discovered, developed & patented the principal component of Marek's disease vaccines now used by all #poultry companies. See more project impacts: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)

As part of a multistate project on #poultry genetics, researchers identified genes associated with resistance to heat stress and Newcastle disease virus. This will help breed #chickens that are better adapted for hot climates. See more project impacts: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)

Insights from a multistate research project have helped breed #poultry that are more resistant to pathogens like *Campylobacter* and *Salmonella*, which are common causes of human foodborne illness. See more project impacts: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)

As part of a multistate research project on avian disease, researchers measured the persistence of #AvianInfluenza viruses in #poultry footbaths, manure & litter. Researchers also studied litter amendments that could reduce virus persistence. See more project impacts: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics) #HPAI #birdflu

As part of a multistate project on avian diseases, researchers made discoveries about the pathogenesis of avian reovirus infections & runting-stunting syndrome that will help design preventative measures. [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)

Scientists working on a multistate project on #poultry genetics identified potential feed amendments that could augment poultry immune responses. See more project findings: [bit.ly/MRF-poultry-genetics](https://bit.ly/MRF-poultry-genetics)