Iowa Livestock Health Advisory Council (ILHAC)

Research Priorities: 2022

**SWINE:**

1. PRRS (emphasis on 1-4-4 L1C)
2. *Escherichia coli* (E-coli – emphasis on virulent post-weaning/F-18)
3. *Mycoplasma hyopneumoniae*
4. *Streptococcus equi* subsp. *zooepidemicus (S. zooepidemicus)*
5. Seneca Valley Virus
6. PEDv
7. Methicillin-resistant *Staphylococcus a*ureus (MRSA)
8. Antimicrobial Resistance (monitoring antibiotic use, looking for information/data to   counteract misinformation, prevention control treatment, proof that drugs (antibiotics) are used properly, variability of normal dose)
9. Animal Well-being (analgesics for pain relief)
10. Swine Influenza (new vaccine technologies-intranasal product)
11. *Clostridium difficile*

**DAIRY CATTLE:**

1. Animal Well-being Issues
	1. Mastitis
	2. Lameness
	3. Respiratory Disease
	4. Discover or develop an FDA approved analgesic for food-producing animals
2. Johne’s Disease
3. Mycoplasma bovis
4. Antimicrobial Resistance (monitoring antibiotic use, looking for information/data to counteract misinformation, prevention control treatment, proof that drugs (antibiotics) are used properly, variability of normal dose)

**BEEF CATTLE:**

1. *Anaplasmosis*
2. Digital Dermatitis (hairy heel wart)
3. *Trichomiasis* (surveillance, identification/verification-cost effective manner)
4. Animal well-being issues
5. Bovine Respiratory Disease (BRD)/Mycoplasma bovis

**POULTRY:**

 **All Poultry**

1. Avian Influenza infections – Low Path Avian Influenza (LPAI) and High Path Avian Influenza (HPAI) epidemiology, prevention and control, research to identify routes of infection.
2. Antimicrobial resistance and antibiotic substitutes in poultry production
3. Lack of approved, efficacious drugs

**Turkeys**

1. Clostridial Dermatitis (Cellulitis)
2. Colibacillosis
3. Salmonella
4. Ornithobacterium rhinotracheale (ORT)
5. Blackhead (Histomoniasis)

 **Layers and Broilers**

1. *E. coli* Peritonitis (#1 disease raised by veterinarians in egg production)
2. False layer syndrome (bronchitis virus)
3. Clostridial infection: necrotic enteritis and Focal Duodenal Necrosis (FDN)
4. Food Safety - *Salmonella spp.* (SE and SH)
5. Internal Parasites – including Coccidiosis and round worms. It is believed these challenges will only become greater with the increased prevalence of Cage-free production. At the present time, there are no treatments available.
6. Campylobacter hepatitis and Spotty Liver Syndrome
7. Internal parasites (round worm treatment for organic producers)

**SHEEP AND GOATS:**

1. Development and production of an effective sheep foot rot vaccine that could be produced and sold in the U.S.A.
2. Genetic tibular dysplasia in Polypay sheep.
3. Parasitic disease in sheep and goats.
	1. Effective use of dewormers while preventing parasite resistance.
	2. Effective management techniques to control parasite disease.
	3. DNA research for parasite resistance and correlating this with fecal egg counts to establish parasite resistance EBV's.
4. Abortion causes in sheep and goats including Cache Valley Fever.
5. Mycoplasma ovipnuemoniae -- Prevalence, economic importance, conditions that produce disease, and vaccine potential.
6. Coccidiosis prevention in young lambs and feeder lambs. Effectiveness of amprolium versus lasalocid in the feed.

**IVMA CONCERNS: Represents all species**

1. Animal Well-being
	1. Pain Control
	2. Lameness
2. Seneca Valley Virus
3. *Trichomiasis*
4. Methicillin-resistant *Staphylococcus aurerus* (MRSA)
5. Johne’s Disease
6. Anthelmintic and antiparasitic resistance – ectoparasite control