Zoetis seeks innovations that can change the landscape of entire research programs or platforms. We look for valuable collaborations from all healthcare or life science sectors. Digital healthcare, machine learning and diagnostic techniques applied to pharmaceutical R&D, and genomics, transcriptomics or proteomics enabling rational drug and vaccine design are areas of emphasis.

### THERAPEUTICS (small molecules, therapeutic mAbs and proteins)
- Chronic pain and inflammation
  - novel biomarkers
  - disease-modification of osteoarthritis
  - no interest in corticosteroids, opiates or NSAIDS
- Immunomodulation
  - anti-infective immunopotentiators and antiparasitics
  - immunoregulatory pathways such as pattern recognition receptors, check point inhibitors, host defense peptides, cytokines/chemokines
- Chronic renal disease
  - disease-modification

### 2019 RESEARCH ALLIANCE INTERESTS

- **Antiparasitics**
  - resistant heartworm prevention
  - novel MOA for flea and tick prevention
- **Antibiotic alternatives**
  - bacteriophages
  - antimicrobial peptides
  - direct immunological approaches
  - antibiotic potentiators
- **Livestock performance**
  - mammary gland health
  - reproduction efficiency
  - new mechanistic pathways in milk and muscle production
  - microbiome modulators/modulation of gut health
  - non-antibiotic liver abscess prevention (cattle)
2019 RESEARCH ALLIANCE INTERESTS

VACCINES
- Novel adjuvants
  - oral delivery adjuvants
  - mucosal immunity adjuvants or procedures
  - TLR-3 agonists
  - synthetic poly i:c
- Metagenomic identification of clinically relevant novel disease agents in livestock and poultry
- Alternative potency assay technologies
- Vectors for cattle/companion animal vaccines

DIAGNOSTIC TECHNOLOGIES
- Multiplexing and microfluidics integration
- Sample preparation
- Simultaneous multiple sample

BIOINFORMATICS
- Integrative software
  - clinical data, RNAseq, and ’omics data
  - canine breed database with tissue for genotyping

TECHNOLOGIES
- Commercializable antibody, protein, and/or peptide expression systems (>5g/L)
- Biomarkers and phenotypic screens relevant to therapeutic and vaccine areas
  - cattle tick burden biomarker
  - transgenic models for target ID/validation
  - safety and immunogenicity prediction for antibodies/proteins
- Formulation
  - enhanced stability/palatants/taste masking
  - oral delivery of vaccines
  - vaccine delivery/injection devices for livestock
  - long-acting injectable formulation systems
  - dissolution & in vitro/in vivo correlations
  - transdermal technologies for cats
  - topical spray technologies for dogs

PARTNER WITH ZOETIS To explore a research alliance with Zoetis, please visit www.zoetis.com/innovation/strategic-partnerships.