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, NSAIDs, or cannabinoids
- Immunomodulation
  - immunoregulatory pathways such as pattern recognition receptors, check point inhibitors, host defense peptides, cytokines/chemokines
- Chronic renal disease
  - disease-modification

- **Antiparasitics**
  - resistant heartworm prevention
  - novel MOA for flea and tick prevention
- **Antibiotic alternatives**
  - antimicrobial peptides
  - direct immunological approaches
- **Livestock performance**
  - mammary gland health
  - reproduction efficiency
  - new mechanistic pathways in milk and muscle production
  - gut health antiinflammatory and permeability substrate
  - non-antibiotic liver abscess prevention (cattle)
  - gut health models and monitoring methods
2021 RESEARCH ALLIANCE INTERESTS

VACCINES
- Novel adjuvants
  - mucosal immunity adjuvants or procedures
  - TLR-3 or TLR-5 (synthetic) 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

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 Technologies
  - enhanced stability/palatants/taste masking
  - vaccine implants, aerosols, microparticle-based, and oral delivery
  - vaccine delivery/injection devices for livestock
  - 3-12 month long-acting injectables
  - transdermal for cats
  - topical spray

DIAGNOSTIC TECHNOLOGIES
- Point of care hematology
- At-home diagnostics
- Image analysis/AI for diagnosis
- Point of care urinalysis
- 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
- Digital integrated solutions for livestock

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

FOR ANIMALS. FOR HEALTH. FOR YOU.